ESIP Community Resilience Cluster Meeting Journal

Planned sessions for 2023	**3**
Jan 18, 2023 Cluster Meeting	**5**
Nov 16, 2023 Cluster Meeting	**8**
Oct 19, 2023 Cluster Meeting	**9**
Sep 21, 2023 Cluster Meeting	**11**
May 18, 2023 Cluster Meeting	**13**
May 4, 2023 Mid-month Cluster Meeting	**15**
April 20, 2023 Cluster Meeting	**16**
March 16, 2023 Cluster Meeting	**17**
February 16, 2023 Cluster Meeting	**19**
January, 19, 2023 Cluster Meeting	**22**
December 15, 2022 Cluster Meeting	**23**
November 17, 2022 Cluster Meeting	**25**
October 20, 2022 Cluster Meeting	**26**
September 21, 2022 Cluster Meeting	**28**
August 17, 2022 Cluster Meeting	**30**
June 15, 2022 Cluster Meeting	**33**
May 18, 2022 Cluster Meeting	**35**
April 20, 2022 Cluster Meeting	**39**
March 16, 2022 Cluster Meeting	**41**
Planned sessions for 2022	**43**
February 16, 2022 Cluster Meeting	**44**
December 15, 2021 Cluster Meeting	**46**
November 17, 2021 Cluster Meeting	**48**
October 20, 2021 Cluster Meeting	**51**
September 15, 2021 Cluster Meeting	**54**
August 18, 2021 Cluster Meeting	**56**
June 16, 2021 Cluster Meeting	**58**
May 19, 2021 Cluster Meeting	**60**
April 21, 2021 Cluster Meeting	**62**
March 17, 2021 Cluster Meeting	**64**
March 3, 2021 Problem Statement and Next Steps	**68**
February 17, 2021 Cluster Meeting	**69**

January 20, 2021 Cluster Meeting **72**
January 13, 2021 Conference Planning Meeting **74**
December 16, 2020 Cluster Meeting **75**
November 18, 2020 Cluster Meeting **77**
October 21, 2020 Cluster Meeting **79**
September 16, 2020 Cluster meeting **83**
August 26, 2020 Cluster meeting **84**
August 19, 2020 Cluster meeting **85**
August 12, 2020 - Problem statement meeting **85**
July 8, 2020 Cluster Meeting **87**
July 1, 2020 Cluster Meeting **88**
June 24, 2020 Cluster Meeting **89**
June 17, 2020 Cluster Meeting **90**
May 20, 2020 Cluster Meeting **92**
Apr 15, 2020 Cluster Meeting **94**
Mar 18, 2020 Cluster Meeting **97**
Feb 19, 2020 Cluster Meeting **100**
Jan 15, 2020 - Cluster meeting **102**
Dec 18, 2019 - Cluster Meeting **106**
Oct 16, 2019 - Cluster Meeting **108**
Sep 18, 2019 - Cluster Meeting **110**
Aug 21, 2019 - Cluster Meeting **111**
June 19, 2019 - Cluster Meeting **112**
May 15, 2019 - Cluster Meeting **113**
April 19- Thoughts from the Data and Action ESIP webinar **114**
April 17, 2019 - Cluster meeting **114**
March 20, 2019 - Cluster meeting **115**
Feb 20, 2019 - Cluster meeting **116**
After ESIP winter meeting notes **118**
Jan 3, 2019 - Session planning meeting **118**
Dec 21, 2018, Arika meeting with Raj Pandya (TEX, AGU) **119**
Dec 19, 2018 - Cluster meeting **119**
Nov 19, 2018 - Cluster meeting **121**
Oct 17, 2018 - Cluster meeting **122**

Planned sessions for 2023

Who is leading? Arika, Rupu, Zachary

Jan:
Feb:
Mar:
Apr:
May:
June:
July:
Aug:
Sep:
Oct:
Nov:
Dec:

Ideas for other meetings (leftover from 2022):

- Arika idea: A 1-hour facilitated discussion group on: What are the skills gaps that Earth Scientists feel like they need to engage with/build “communities”? I would share some seed thoughts on how communities might show up in Earth Science, and then pose 2 different prompts for 15 min break out groups.
- Denise Hills idea: CODATA Task Group, Improving Data Access and Reusability (IDAR) that Steve Diggs and Denise Hills co-chair along with Dirk Fleischer and Shaily Gandhi.
- Jonathan Blythe idea: Understand regulatory frameworks we are working under. Can we come up with a vocabulary for regulatory frameworks that we could use across ESIP?
- Goals of these meetings (this may evolve or start broader initially):
    - Leading practices for data management to make data reusable for community resilience outcomes. Make data actionable and operational.
- Guiding questions for presenters
    - Can you describe the community/ies at the center of a project that you’ve worked with? For example, what characteristics define this group as a community (e.g. place-based, identity-based, something else)? What was your interaction with them like? What were some challenges/solutions? What were the primary lessons learned from this project/presentation/paper?
    - Can you describe different ways that people with ESIP-like jobs (e.g, earth science data professionals, earth/data/information science researchers, independent contractors) interact with place-based communities? For example: What roles did they play, What kinds of projects did they do, How did they build those ties with the community?

    - Here is a draft of our Problem Statement for the Community Resilience cluster (currently in review). From your perspective, is there anything that you might add to these ideas?
- Post-meeting reflection questions (some ideas - please change!)
    - What about this meeting topic most interests me/most relates to my work or what questions does it leave me with?
    - How did today's meeting help shape what goals the Community Resilience might set in the future or a specific activity we might take on?
    - Based on the above, what follow-up actions should we take? (maybe spins off a new meeting agenda or speaker…)

Discussion Topic Bank/Wishlist

- how to transition to truly community-led governance structures

Jan 18, 2023 Cluster Meeting

Participants

- Sruti Modekurty
- Arika Virapongse
- Gijs van den Dool
- Rupu Gupta

Agenda

- Introductions
- Discussion
    - Show and Tell (Share your current work or past projects with place-based communities
        - Gijs work: data interface, problem definition
            - Bridge ML engineers with Tanzania Forest Dept - grant to manage forest better
                - Track management of forests
            - GIZ / UNFCCC - which university programs are being developed for land degradation neutrality?
                - Who would be partners for GIZ?
            - Papa New Guinea: how far are people traveling for drinking water
                - 700 returned questionnaires
            - Assessing readiness of data, like remote sensing data, not always analysis ready
            - What data exists already, what needs to be collected
            - Connecting to other areas and datasets, what's happening at a larger scale
            - WRI/DEMA(?) - NLP in Latin American countries - have incentives for land protection work been successful
                - DB of 15,000 documents, 3 languages
        - OpenDAP
            - This is a platform/protocol used to access large datasets, like NASA earth observation data
            - Could be used to compare their local data collection with larger datasets from other areas, how does their work fit on the bigger picture?
            - data-poor areas - relying on NASA data
                - Could be used to access Indian data for example, how comfortable do they feel making it open to everyone?

            - Limited technical capability in these areas, very educated researchers and policy-makers
        - Local map for stakeholder workshops helps people start the conversation
        - How can you link in-situ researchers and their localized data, and how do they scale up
    - Topics of Interest (What would you like to discuss at future meetings?)
- Potential Plan for 2024
    - Topics for each month to have guest speakers and focused discussions:
    - Feb - Community Integration in the Scientific Pathway
    - Mar - Capacity Building to Bridge Science and Communities
    - Apr - Openness vs Self-governance
    - May - Data Accessibility
    - Jun - Meeting Prep
    - Jul - Meeting in Asheville
- Discussion Topic: do you know any tools that facilitate the integration of local and indigenous knowledge into local climate/adaptation planning?
    - RapidPro - tool to build messaging-based surveys
    - Citizen science tools and literature
    - Body of knowledge about how to work with communities and indigenous knowledge
        - Relationship building is important
    - Question comes from biodiversity call to get understanding of how it has changed over time and what is the level of diversity normally seen in the area
        - Uzbek/Mongolian communities seeing their herds changing
    - Community-based monitoring
        - participatory-based M&E
        - Arctic and Amazon - cutting edge
        - SE Asia - community-based forest management in Indonesia, Malaysia
    - Effectiveness of programs for climate adaptation
        - How to Track Adaptation to Climate Change: A Typology of Approaches for National-Level Application http://www.ecologyandsociety.org/vol18/iss3/art40/
        - A review and classification of analytical methods for climate change adaptation https://wires.onlinelibrary.wiley.com/doi/10.1002/wcc.322
        - https://www.scientificamerican.com/article/what-conservation-efforts-can-learn-from-indigenous-communities/
        - Plan-Adapt and https://swed.bio/
- Potential idea: 10 minutes per person, share ideas
    - Geoawesomeness invites people to join to talk about topics:
    - Can be good to commit people and get them excited for certain topics
    - Low barrier to entry
    - Example:

- In 2024, we’re dedicating each month to a specific theme, but are open to articles beyond these areas too:
- January: Bringing space data down to earth
- February: The importance of real-time geospatial data
- March: Sustainable agriculture using geospatial intelligence
- April: Trends and developments in the industry

Nov 16, 2023 Cluster Meeting

Participants

- Sruti Modekurty
- Megan Carter
- Arika Virapongse

Agenda

- Introductions
- Discussion
    - Show and Tell (Share your current work or past projects with place-based communities
    - Topics of Interest (What would you like to discuss at future meetings?)
        - Examples of community-based environmental efforts (ex. I would like to monitor, sought out a solution to a problem they've had, non scientists) - what has gone well, not gone well
        - Transition of power moment - communities becoming leaders, good examples
        - Leaders starting projects, but not turning over leadership to the community
        - Community agreements - what people's efforts are going to
        - The exchange knowledge approach
            - Decolonizing knowledge
            - Maybe we don't see them because they look different than what we expect
- Planning
    - How can the cluster support community engagement in Asheville ahead of the ESIP meeting in July 2024?
        - Very entrepreneurial, lots of small businesses
        - Cultural heritage strong
        - Exploring teacher persona - what are their barriers/incentives?
        - Probably has been gentrified
        - Craft colleges

Oct 19, 2023 Cluster Meeting

Participants

Arika V
Megan C
Rupu G

Agenda

- Introductions
- Updates
    - ESIP.local (new FUNding Friday Project)
        - Invite folks from Asheville to share their work
        - Share their work
        - Leverage the work of Funding Fridays
    - ESIP Survey
        - MC- Often the case that response rate is low
        - Strategies: making specific asks- inviting them into the space to do a live survey; exploration mechanism; who's active
        - Go to ESIP meetings of other clusters (dedicated person to do that)
        - How valuable it would be to do the survey push again- not sure
        -
- Ways to engage the ESIP community
    - Advertise speakers
    - Last few meetings have been more administrative
    - Highest Attendance - webinar style; people dont have bandwidth other than listen; Allison has a nice slide- one pager to share about your work; people who highlight what will happen during our session; building our archive- 5 examples of cool place-based communities; building an output; every other month - outset- webinar- inviting speakers to talk about their work;
    - Invite outside speaker - what would benefit them? A recording to share with speaker
    - Heavier lift- talking about it and hyping it up (Allison Mills)
    - Fulfilling that model could be difficult
    - Reminder of the goal
    - Let's start with interests us
        - COOLER project? (AV & RG working on it)
            - AV went to a refugee center; community resilience issue
        - Missing a case study (asheville, Funding Friday, could fill that gap perhaps)
        - Build up to Asheville conference (July 2024)

            - Seattle (conference 2025)
            - Asheville has seen flooding; work with a specific cluster (Disasters?)
        - COLLIDER (https://thecollider.org/)
        - Scoping out what works - maybe talk
- Next steps
    - Plan for (Feb/March/April)
    - Get to know this community (Asheville)
    - Nov meeting
        - Share out ESIP survey results (?)
        - Planning meeting
        - Couple of sentences to Allison
        - Which groups do you want to reach out?
        - Send list to mailing list

Ideas to engage other ESIP members in webinar series

- From MC - “Might also be good to invite Douglas Rao and Ryan Berkheimer, both located in Asheville (NOAA - affiliated); Laura Brenskelle”- RG & SM
- ryan.berkheimer@noaa.gov
- douglas.rao@noaa.gov
- brenskelle@caseconsultantsinternational.com
- Goals for the meeting
- Groups we reach out to
- Product we share with them (Stakeholder engagement)

- Discussion (n/a because of attendance)
    - Show and Tell (Share your current work or past projects with place-based communities
    - Topics of Interest (What would you like to discuss at future meetings?)

Sep 21, 2023 Cluster Meeting

Participants

- Sruti Modekurty
- Laura Brenskelle
- Arika Virapongse
- Megan Carter

Agenda

- Intros (including your interest in and experience working with communities)
    - Sruti: What it looks like to initially engage with communities?
    - Megan: How to start integrating community work into ESIP cluster work
    - Laura: contractor at NOAA, metadata specialist. What is the most consumable way to help people access data for making decisions?
    - Arika: currently working with climate activists in Colorado; development of individual leaders/community champions? Grassroots community development?
- ESIP.local (new FUNding Friday Project) Discussion
    - SOW Doc
    - Identify stakeholder groups
        - Community group
        - Climate activist group easy to access - have a hard time to reach academics
        - Community group - on the ground - find someone to talk to to
        - Challenges at large? Happens to relate to data?
        - Non-profits -
            - bigger ones take up a lot of space,
            - smaller ones - less resources, might put a strain
        - ESIP one-off, not a longer term engagement
            - Make connections (networking opportunity) - make this a goal
            - Build in this infrastructure
                - Names, contacts, spreadsheet directory?
                - What you have to offer, what you need? Make it possible
                - End goal - directory
        - Hire someone to go and talk to people and have meetings -
            - Are you aligned?
        - Ask first - what are your challenges? Find a few champions
        - climate/conservation organizations -
    - Possible Partners
        - National Environmental Modeling and Analysis Center (NEMAC)
            - Might be grad only?
        - https://appalachian.org

        - https://www.ashevillegreenworks.org
        - https://mountaintrue.org
    - Challenges to address
        - Make it easier to get outdoors/outdoor resources
        - Conservation organizations for land - natural environment vs growth, sustainable development
        - Asheville has branded itself the ‘Climate City'
            - https://www.ashevillenc.gov/department/sustainability/climate-initiatives/climate-justice-initiative/
        - Existing Community resilience projects?
        - Businesses have sustainability plans
            - Emissions requirements - next year requires sustainability plans (federal government)
    - Ideas
        - Stakeholder management list
            - Call for sessions, use to invite speakers
            - Can get most information from the websites
            - 5 interview questions - where do you get data from?
                - Trust in data - meeting theme
                - Who do they trust? How does it help them with their approach
                    - Ex. wildfire - gas station attendant
        - Biggest industries - economic drivers
            - Tourism
        - Convening activity at Meeting
        - Mechanisms for incorporating them into the meeting
            - Research showcase
            - Networking meeting
            - Early career/student career focus
            - What would Susan be comfortable with at the meeting?
            - Inviting groups to share needs of people on the ground
            - Plenary - introduce data-related challenge
                - Some subset of FUNding Friday awards to work on the projects
        - Bring in core PI/project leader based in Ashevile, keep the engagement meeting going
            - Ensure sustained engagement
        - Bring in undergrads with GIS skills from Knoxville (1-2 hours from Asheville)
        - Training for scientists to engage with communities
        - Data workshop
        - Identify data needs
- Cluster Activities Recap

    - ESIP survey

May 18, 2023 Cluster Meeting

Participants

- Arika Virapongse
- Gijs van der Dool
- Sruti Modekurty
- Megan Carter
- Jonathan Blythe
- Rupu Gupta
- Talya ten Brink

Agenda

- Intros
- Cluster business
    - *Leadership updates
        - Arika stepping down as co-chair
        - Rupu will continue as co-chair but would like a co-chair
        - Jonathan: Maybe bring someone new into the group? Thinking of a Kelsey Bresemen from EDGI (environmental data and governance initiative)
        - Two points to add in invitation email to the ESIP community to recruit new leadership (from Megan)
            - Non-negotiable asks
            - And what they would want to do
        - July meeting could be a good place to meet people and bring them in
        - Arika will write blurb for the Monday Update for Megan, but **maybe this should be coordinated with the survey??**
    - ESIP survey
        - There is a rough draft available.
    - Plan for June meeting
        - Rupu cannot attend this meeting
        - Let's have a June meeting. Although, Sruti submitted a July session at ESIP…
        - Sruti to lead the meeting.
    - *ESIP July session
        - Sruti submitted a session
        - Sruti might join this session instead: Row 43: https://docs.google.com/spreadsheets/d/18imA_bs_fpVKHfX6YC5iur4prc

zqDsAa_wYfhmdrIEo/edit#gid=44159715 Opening doors to climate preparedness in small communities.

- Debrief of EGU session
    - Met someone from India; not many standards for air quality; maybe even start ESIP in India
    - Open science and open data help desk - SM learned a lot, connected with people
    - Work with this cluster is very much needed; how can climate science work be made more actionable?
    - *Gijs van den Dool - Talking about his work
    - 2 objectives-
        - Spinoff on comm driven work in reforestation; worked with machine learning community on a project in MAdagascar
        - How does data that's being generated get fed back to communities? Example project- Drinking water quality work in Papua New Guinea; how can UNDP support a network and work with local communities?
    - Bridging connections between junior and senior scientists? Both benefiting from the other group
    - UNDP's priority was climate change; the project identified drinking water as a way to bridge climate change and health priorities

May 4, 2023 Mid-month Cluster Meeting

Participants

- Arika Virapongse
- Megan Carter
- Rupu Gupta
- Sruti Modekurty
- Talya ten Brink

Agenda

- Discussion of the future of this cluster.
    - Rupu will have a reduced bandwidth starting in June,
        - She would like to stay on as a co-chair.
        - She would like to set up a survey.
    - Arika will have a reduced bandwidth starting in August/September and has been leading this group for the past 6 years, so is:
        - Ready to give some space for new leadership for the cluster.
    - Sruti:
        - She foresees herself continuing to work in the community resilience space, so would be interested in continuing to participate.
        - Could invite people to come and give talks.
    - Talya: What would make her come back?
        - She's interested in having interesting conversations, and finding new ideas. Possibly working on a project or write a research paper.
    - Megan ideas for next steps:
        - Hiatus is an option
        - SM - if necessary, can move to another cluster
        - New leadership from within the cluster?
        - Cluster could meet every two months, share updates
        - Reading group format?
        - We could meet every other month instead.
        - We could recruit more people.
            - We could either invite people to us or visit others.
            - Doing a survey might help us to interact with other people.
            - Cloud computing is the biggest cluster right now–they are doing like a webinar series. But Aimee B. is ready to step down.
        - Survey:
    - Next steps:

- **Rupu send email:** Before the meeting, reach out to our core group and ask ZR directly if he is interested in being a co-chair (Jonathan, Zachary, and Ruth).
- **Before May meeting:** Send a blurb to Megan to put into the Update:
    - We could advertise to the ESIP community that we are very open to new contributors or people to come and share their questions/interests in Comm Resilience.
    - **Coffee Hour? Join us for informal conversation**
    - Survey announcement too. We are doing this to help inform our community.
    - SM interested in inviting people to come present and join the cluster in the next few
- **Survey sent out by the end of May.** So we can get some feedback before we meet again in June.
- **Wish list** - on top of meeting journal page for each meeting and we can pick what we want to talk about.
- **Unconference** style- what would you like to talk about today? WHat has been

Cluster meeting plan:

- **May 18th meeting:** Announce Arika stepping down at the May meeting, and invite new leadership.
- **June:**
    - Cluster meeting.
    - Rupu can't attend.
- **July:** No meeting.
- **August meeting:**
    - There is an ESIP meeting highlights etc, so often people don't do a meeting for August.
    - AV could go; RG might be able to attend
- **September meeting:**
    - Cluster meeting
    - AV might be out
    -

April 20, 2023 Cluster Meeting

Participants

- Arika Virapongse
- Ruth Duerr
- Megan Carter
- Rupu Gupta
- Sruti Modekurty
- Jonathan Blythe

Agenda

- Introductions (if new attendees join):
    - Ice-breaker: How is community resilience relevant to your work currently?
- Additional input on Sruti's EGU 2023 presentation
- Cluster business
    - ESIP summer meeting
        - Attendance: Sruti, Ruth (virtually), Arika will probably be there, Jonathan would like to go
        - Summer session (Ruth's session with Steve Diggs & Denise Hills - Al Gore's Climate reality training)
            - E.g., DOE Community development plans - how to help the process
        - Workshop for data managers?
        - Workshop with community groups in Vermont
        - Other updates?
    - Recap of priorities/projects discussed during internal March meeting (e.g., ESIP-wide survey)
    - Update on cluster visits? e.g., Sustainable data management group
- Next steps?

March 16, 2023 Cluster Meeting

Participants

- Arika Virapongse
- Ruth Duerr
- Megan Carter
- Rupu Gupta

Agenda

- Introductions (if new attendees join):
- Review EGU 2023 session presentation draft
    - (Sruti's Notes):

        - I made the presentation based off of existing presentations and the paper (still very much a work in progress but main points should be there)
        - Format is in-person oral presentation (8 min presentation + 2 min questions) so not too much time
        - If you could look through it and flag anything that's missing and important to include that would be great! Also feel to re-word
        - More importantly, if you could discuss these questions, it will help me tailor the presentation
            - Do we have new projects or information since the paper came out we would like to share?
            - What are we hoping to get out of the session? New members? Collaborators? More examples/best practices? Feedback?
            - Relatedly, what is our call to action?
                - **Ruth: EGU is about sharing information about our work.**
                - **We added in some suggested additional text**
        - Our next telecon is Apr 20, a week before the conference, so we will have another chance to discuss and make any changes
- Cluster business
    - Recap of priorities/projects discussed during internal March meeting
        - **ESIP Survey to be sent to ESIP community (RG, ZR, AV can support)**
            - How do ESIP members interact with (directly/indirectly) with place-based communities? What needs do ESIP members have?
            - Sruti will be at the Data Help desk. She could workshop some exploratory questions:
                - **What types of roles do you have with data (researcher, data manager)? Have you worked with place-based communities? What have you learned? What are the challenges?**
        - **Workshop** (for ESIP July meeting) - SM will find details about the proposal review process
            - (Sruti) Session proposals for the ESIP Summer Meeting are due May 8, so plenty of time to think about the workshop. Call for sessions.
            - **Focused ESIP workshop on data managers? Ideas:**
                - LTER Information managers have a co-located meeting with ESIP - dozens of people who manage the data for LTER
                - Council of Data Facilities - This is a central place where data managers are meeting.
                - Data managers interface between Data from researchers and the End users of data. Interaction with end users–could be via a system (no interaction) or

human-centric (1:1 interaction). They might try to get tools built to help their end users. Data managers don't typically interact with communities to the degree that ELOKA did. Because data managers are employed by a data center.
        - Data managers are swamped. They get so many unfunded mandates, so they'll have a tough time addressing yet another new type of mandate.
        - Could we align with CARE efforts? Sustainable data management cluster 2 PM MT tomorrow Mar 17th. They are working on a paper on how to operationalize the CARE principles for repositories – if you are following CARE principles what does it mean. They are still working on a first draft (they are halfway there).
        - Pilot needs assessment study with data managers.
    - **Attend Wildfires cluster meeting**
        - Rupu, Arika, Ruth attended
        - How could we contribute? Not obviously. Maybe the RFP (below). Send it to the email list- invite them to come to the next Community Resilience cluster.
            - **Let's wait 1-2 meetings to allow their mailing list and Slack channel to grow.**
    - **RFP (through Natural Hazards Center)**
- Do we want to have another internal coordination meeting?
- Revisit budget for clusters (Ruth to give an overview)

February 16, 2023 Cluster Meeting

Participants

- Jonathan Blythe
- Rupu Gupta
- Sruti Modekurty
- Dense Hills
- Megan Carter
- Arika Virapongse
- Peter MacHarrie

Agenda

- Introductions (if new attendees join):

    - Ice-breaker: “Invent a job that will exist 100 years from now”
- Debrief on ESIP meeting
    - Sruti: first time participating; great experience;
    - sessions of interest:
        - Env justice from the govt, work with communities, Monica Unseld Until Justice Data Partners (https://www.untiljusticedatapartners.org/)
        - Denise H spoke with MU; will follow up with her, MU wants to engage ith ESIP more; next steps: invite her to the meeting to share more about her work; stay for 10 minutes or for as long as you want
        - Review of current international collaborations for ESIP; folks from RDA (Research Data Alliance)
    - Zachary did an excellent job of representing this group in the joint Open Science/Information Quality Clusters session: https://youtu.be/Y7BUL4QBVY8?t=1126
    - ESIP Meeting highlights next week
        - Join for the ESIP Meeting Highlights Webinar: Wednesday Jan 22nd from 3-4:30 pm ET - fast-paced highlights from 10+ sessions: https://esipfed-org.zoom.us/meeting/register/tZ0tfuGqqzwpHtHrm7X4pFGFN8S4Isv94Krs
- Submission for EGU 2023 session
    - Sruti will share the draft of the presentation soon, so we can give her feedback on it
    - April session will happen right before the EGU session, so we can prep
    - SM to represent a data helpdesk (exhibit booth) - important ambassador; will also ask question/survey format to folks who visit the exhibit
    - Idea from MC: “And [SM] can add a slide to your presentation to say come talk to me at the Data Help Desk”
- Thoughts from Peter M: Background is data science, around env topics, getting the data into a usable format
- Next Gen Tribal Engagement Community of Practice: This special training session will be delivered by James Rattling Leaf, Sr., Sicangu Lakota Oyate, Tribal liaison with the Environmental Data Science Innovation and Inclusion Lab and the North Central Climate Adaptation Science Center.
- Recruitment and engagement into your cluster: How can we do this better?
    - What is our Join Us statement?
    - What are our priorities? What can we feasibly do? What can we feasibly lead? We might need to have an additional meeting to be able to do this.
    - **Goals of a Strategy meeting:**
        - **Actions from the paper (ESIP mid-year meeting?)**
        - **Focus on strategizing our next actions steps**
        - Options: Meeting 2 weeks from now; 90 min meeting or 2 hour meeting
        - **Proposal: 2 week from now 90 min meeting (March 2, 1 hour earlier); Arika will organize/schedule and send around meeting invite**

- Proposal for Wildfire Response RFP
    - JB: wildfire in the context of relocation, James Railting (?), native american tribes
    - How do you evacuate? How do you tell audiences to move?
    - Wildfire cluster meeting: March 8, 4pm ET **- Rupu can join this**
    - Discuss next steps:
        - Look at the document and add comments, and we'll talk about this proposal more on the March 2 meeting.
    - There is also an ESIP Lab RFP on Wildlife Fire (https://wiki.esipfed.org/Wildfires)
- Open Science cluster follow up - interacting with Information Quality
- Cluster business
    - Revisit budget for clusters (Ruth to give an overview)
    - Reassess plans for 2023
    - **Let's address this at the March 2 strategy meeting**
- What are ways that we could make our cluster more valuable to ESIP?
    - We focus on the people-side of things at ESIP; many other clusters focus on the more data-side of things
    - Making the data useful to people is highly important

January, 19, 2023 Cluster Meeting

Participants

- Sruti Modekurty
- Arika Virapongse
- Zachary Robbins
- Ana Prados
- Jonathan Blythe
- Megan Carter
- Sakib Imtiaz
- Ruth Duerr

Agenda

- Introductions (if new attendees join): What do you too firmly affirm or deny yourself too often about yourself?
- Plan for ESIP meeting
    - Discuss presentation for open science cluster: https://docs.google.com/presentation/d/1SQD1CoGXb2D3GQimt4X5eVOf76DP0Jgw/edit#slide=id.p1
    - Go over the ESIP meeting schedule to see where we'd like representation;
    - **Give feedback by Tomorrow**
- Proposed submission for EGU 2023 session
    - Review abstract drafted by SM
    - **Give feedback by TODAY**
- Proposal for Wildfire Response RFP
    - Review draft proposal developed by RG
    - **Give feedback within the next week**
- AGU Thriving Earth Exchange call for fellows RD
    - Working with community group to fulfill science need (~12-18 months)
    - https://thrivingearthexchange.org/community-science-fellows/
- Cluster business
    - Revisit budget available for clusters - Ruth to give an overview for next meeting. She is on the finance committee. Pays for products only. $40k available for all of the clusters at the ESIP.
        - JB idea: Attending meeting.
    - Reassess plans for 2023 - Let's do this next meeting?
        - ESIP Community Membership?

December 15, 2022 Cluster Meeting

Participants

- Sruti Modekurty
- Ruth Duerr
- Arika Virapongse
- Jonathan Blythe
- Rupu Gupta

Agenda

- Intros (including our new Community Fellow! Sruti Modekurty [Shroo-thee Mo-day-koor-thee])
    - Everyone else introduce themselves
- Plan for January ESIP
    - Zachary -
        - he will touch base with open science cluster & wildfire cluster again–about participating in those sessions; he already reached out to them and haven't heard an update
        - **Next steps: Will send around drafts of stuff before the next meeting**
    - Sruti - will be attending
    - Ruth - will be attending;
        - 3 semantics related sessions - all are about finding relevant data
        - 1) schema.org, 2) semantic harmonization - leading practices, success stories and moving forward, 3) knowledge graphs - Ryan M. is chairing, science and connection to humanity
    - "Post wildfire trusted data" - Get in touch with Dave Jones and Karen Moe about contributing to this session
- Natural disaster small grant - discuss submitting something
    - https://hazards.colorado.edu/research/weather-ready-research-wildfires?utm_source=NHC+Master+List&utm_campaign=f8ca2f6fe5-QR_COFlood_Callout_COPY_01&utm_medium=email&utm_term=0_dabc309806-f8ca2f6fe5-54486502
    - Proposal: How are Earth Scientists thinking about engaging with community members in the process of pre-fire preparation?
- Cluster check-in & business
    - Re-assess roles
        - Arika & Rupu: co-chairs
        - Rupu: Drafting the agenda / Alternate with leading meetings
        - Arika: Leading the meetings
        - Zachary: Alternate with leading meetings

        - Sruti: Sending out the agenda & meeting reminder, updating the Wikipage, start the Zoom
        - Other tasks:
            - Budget - $10k max and can't be for people's time; usually it's spent on publications costs
            - Pot of money = $40K across clusters and committees
            - Goals
            - Writing meeting notes
- **Jonathan will circulate a When2Meet and find a new time for us to meet** https://www.when2meet.com/?18023606-tbX2J
- For next meeting:
    - Jan:
        - Go over the ESIP meeting schedule to see where we'd like representation;
        - Rupu working on "proposal" draft
        - Budget
        - Re-assess plans for 2023
            - ESIP Community Membership?
    - Feb:
        - Summary of the meetings

-

November 17, 2022 Cluster Meeting

Participants

- Morgan Wofford
- Zachary Robbins
- Ruth Duerr
- .
- .
- .
-

Agenda

- Quick intros
- Cluster check-in & business
    - ESIP session conversation? Zachary can attend
        - Morgan to send email connecting Zach and open science chairs for January meeting
    - Review Morgan's changes to Wiki
        - Good
    - Organize guest presentations - AGU Thriving Earth Exchange
        - Match communities with specific needs with scientists that can help
        - There needs to be a repository involved with each of these projects - can ESIP (this cluster) make these connections?
    - Natural disaster small grant - discuss submitting something
        - Move to next meeting
    - Re-assess goals and plans
        - Move to next meeting, review for January meeting
        - Suggestion to have section during monthly meeting where we review/get updates on members' work
    - Go through our list above
    - Zachary presentation about grant application
- December plans
    - Plan for January ESIP
    - Natural disaster small grant - discuss submitting something
    - Re-assess goals and plans

October 20, 2022 Cluster Meeting

Participants

- Morgan Wofford
- Arika Virapongse
- Jenny Hewson
- Ruth Duerr
- Megan Carter
- Rupu Gupta
- Jonathan Blythe

Agenda

- Quick intros
- Cluster check-in & business
    - Open Science cluster info: https://wiki.esipfed.org/Open_Science_Cluster
    - Open Science Collaboration Area Presentation
        - Cluster really new, first meeting in MArch; keen to have a summer meeting; OS is a massive topic, where we could make a headway
        - Brought together 5 practitioners, different stakeholder groups, what are the trends they are seeing? (See details in Jenny's presentation)
            - Standards and structures
            - Trust
            - Access to hidden knowledge
            - Data governance
            - Knowledge commons
        - Asked participants of session what the current trends they are seeing
        - Resulting mind map
        - How to mitigate trust in data professionals, inclusive practices,
    - Update of activities session in Wiki
        - We should consider re-drafting this and matching to our new draft of values/mission/goals.
        - **Morgan will draft**
    - Review from last meeting - A community of practice/brain trust. We come together to talk about the projects that we are working on–and looking for input. How do we actualize community resilience practice for ourselves?
    - Fellow program ends in Nov (ie Morgan's tenure)
    - Call for Sessions open (2023 January Meeting, virtual, Jan 23-27, Theme: Opening Doors to Open Science)
- November plan:
    - ESIP session conversation? Zachary can attend
    - Natural disaster small grant - discuss submitting something

- Re-assess goals and plans
- Go through our list above
- Review ESIP trainings and maybe do some of these activities

September 21, 2022 Cluster Meeting

Participants

- Morgan Wofford
- Jonathan Blythe
- Arika Virapongse
- Zachary Robbins
- .

Agenda

- Quick intros
- Cluster check-in & business
    - Journal article and blog post media - Update from Allison
        - Morgan to check in with Allison on next steps
            - make list of people we talk to
        - Arika potentially main point person
        - Potential venues
            - Eos
            - Anthropocene
            - Hakai Magazine
            - AGU Blogosphere
            - Alex Witz
    - Presentation at USGS workshop on data preservation
        - Post a link for the slide deck to the wiki - **Arika send to Morgan**
    - Arika meeting with Open Science cluster people today (Jenny Hewson and colleagues)
    - At the recent ESIP summer conference in Pittsburgh, the *open science* cluster organized a session around *Building a Thriving Open Science Community*. As part of the session, we implemented an interactive mindmapping activity, orchestrated by Charley Haley (cc-ed). We also held an 'unconferenced' session and, over the course of the two sessions, the participants generated a rich 'mindmap' of *emerging trends in open science*.
    - Charley and I chatted about the mindmap yesterday, and we feel it would be really useful to have a chat with a few cluster leads. We also discussed having cluster leads participate in a future open science cluster monthly telecon to highlight areas that that cluster might be focusing on around open science as this will help the open science cluster identify opportunities/gaps, etc.
    - Could I set up an initial 30-minute zoom with you to review the mindmap, brainstorm areas that the community resilience lifecycle cluster might be working on, and where this fits in the mindmap?

    - Recording of the Open Science session: https://2022esipjulymeeting.sched.com/event/12esO/building-a-thriving-open-science-community
    - What do we want to examine in case studies for potential January meeting presentation?
        - We could contribute to the Disaster session on Wild Fire–they are talking about recovery.
    - Discussion of terms - What we mean by community resilience
- October plan
- Future plan:
    - A community of practice/brain trust. We come together to talk about the projects that we are working on–and looking for input. How do we actualize community resilience practice for ourselves?
    - Each month we have a feedback session on one project
    - By the end of the month, we settle on who is going to be the next “featured topic/project/paper”

August 17, 2022 Cluster Meeting

Participants

- Morgan Wofford, ESIP Fellow
- Arika
- Rupu
- Jonathan
- Zachary
- .
- .

Agenda

- Quick intros
- Cluster check-in & business
    - Update on blog post
    - CR Cluster Lightning Presentations for ESIP Summer Meeting Session (Jonathan's presentation)

Email from Jonathan:

I wanted to report back to you that the ESIP presentation went well. In the end, many of the recorded presentations had to be cut from the agenda, and I crammed this presentation into under four minutes. There was a great remote presentation by Jonathan Bruno, who I think we need to involve in future cluster meetings on this topic. He made many of the same points for me. The take away from the meeting is that we need to focus on the evacuation as part of the fire preparedness plans - apparently there are funds available through the infrastructure bill to do this at the local jurisdiction level, and this would be a good opportunity to implement some of our community resilience concepts as outlined in the presentation.

Another note, the Lab Plenary speakers were great, and I followed up with Renee Sieber (renee.sieber@mcgill.ca) even before I realized she was scheduled to give the plenary, because she asked a very pointed question at the knowledge graph session I was co-leading on day one. I realized later that she was an author for one of the articles that we read on the community resilience cluster (I believe it was this critique on Open GIS Data: https://doi.org/10.1111/tgis.12283). After seeing me present the lightning talk at the fire session,

1) she complemented me on giving a good talk (she also said it was dense which I realize now doesn't sound like a complement), and

2) she was interested to learn more about how we are applying resilience concepts in our ESIP cluster.

I think I may have recruited another member for the cluster, but I'll be sure to let you know if she writes to me and asks for more information or how to get connected to the cluster.

Notes:

- There is too much focus on intense events, and not long term chronic issues
- Example: Fire fighters
- Maybe go back to our diagram–what are examples of communities that plays better into that idea of restructuring – Opportunity.
- Next session: January. It's framed as a disaster lifecycle; they'll talk about recovery. So we could present on recovery–moving forward to something better.
- Invite her to a future meeting?
    - Maybe engage with her (and others) at the ESIP session instead.
- How do we reach vulnerable communities so that they evacuate?
- Maybe apply our context to specific examples, e.g., open system. Wildfire and others.
    - E.g., Case study of places that are close to home. Focus on wildfire that ESIP clusters are already working on.
    - Sept meeting; What is our framing for case studies? Our template for case studies. Also looking at terms. Review the IPCC 2022 report. What is possible? E.g, an assessment framework. Use our paper as a foundation.
    - October meeting of plugging our case study into the model.
    - Creating an assessment framework along our paper's recommendations
        - Specific action items in particular contexts

    - Finalize Cluster Planning Doc (very quick)
    - Plan for September
        - What do we want to examine in case studies for potential January meeting presentation?
        - Discussion of terms - What we mean by community resilience
- Open Science cluster team may be joining
- Tentative: Presentation on Data Preservation & Environmental Equity
- Tentative: Review of Arika's paper with EarthCube

Data preservation: What do I mean by data preservation? (e.g., repository and historical record)

Earth Science data preservation dogma–they think about "designated community". Data comes from scientists and its for scientists. Our paper is very critical of that approach–we say that data should be used by everyday people. Environmental data is unique–it can't be replaced. You can never re-create the condition.

Understanding the bias in the data—algorithm. You are re-enforcing a decision that was made initially. E.g., spatial location, why study what, poltiical motivation–the only history–the most important thing to study. Move towards a framework to understand what biases are in those records.

Repositories serve a specific purpose. But we need to think about repositories for these other purposes (not just for science). Other perspectives are not being represented. What is being lost by ot presersiving data for their use, e.g., citizen science data. What gets lost? E.g. NSF data usually gets archived. But there are data collected by municipal gov'ts–where does that get archived.

There is social science data repositories as well – more challenging. [Maybe we will have a conversation about this? We haven't been talking about that.] What is the point of preserving this? It's human history. It's a different type of question. Understanding where the environment is going… that is a social science question.

Actions:

- When those biases are understood, then making those changes in the repository.
- Curating data for communities.
- Costs money to contribute to and use data
- What data are worthy to be added to repositories. (tread lightly on value judgements).

- **Next steps/Additional meeting topics**
    - Social science data preservation/repositories

June 15, 2022 Cluster Meeting

Participants

- Megan
- Morgan
- Jonathan
- Ana
- Andrea
- Rupu
- Eleanor Davis Pierel (past Community Fellow, wants to be more involved with the group)

Agenda

- Quick intros
- Cluster check-in & business
    - Update on blog post
        - Notes
        - MW provides update on blog post
    - Very quick update on Cluster Planning doc
    - Plan for August
        - Review of Arika's paper with EarthCube
            - LInk to paper: https://drive.google.com/file/d/1e3Xh9hd0g4QyAp6uIH5C-ZzbMORBeXpY/view?usp=sharing
        - Open science cluster will be joining
        - JB asks - how do people think of the value of doing peer review with colleagues before submitting the paper?
            - Benefits:
                - Paper is strengthened;
                - Demonstrates open research process;
                - Fosters Community building
            - AT comment in chat: Would be careful recommending this as leading practices because it can put people at risk for getting scooped;
                - Add code of conduct to protect ownership
            - If it's community-driven research effort, need to involve the community in the process
            - Perhaps have a cluster meeting on this in the future
- Reading group: Eicken, H., Danielsen, F., Sam, J.-M., Fidel, M., Johnson, N., Poulsen, M. K., Lee, O. A., Spellman, K. V., Iversen, L., Pulsifer, P., & Enghoff, M. (2021). Connecting Top-Down and Bottom-Up Approaches in Environmental Observing. BioScience, 71(5), 467–483. https://doi.org/10.1093/biosci/biab018

    - Ties to IARPC session on “Web Based Software for End Users Living and Working in the Arctic”
- Data management- ESIP can play a role, differently structured data
    - How do data managers technically allow for different structured data in their repositories.
        - Role of standards
- IARPC session- focused on IT and software used to do the work
- Broader context for paper- citizen science vs CBM
- Communities are very diverse. NASA has resources to cater to the academic community but it will be difficult to provide resources to so many diverse communities. How do they do this? Ana shared insights from a project (to add link here):
    - Data are becoming more granular which makes it potentially more useful to local communities than it once was.
- Large organizations provided their data in ways more accessible to their communities
    - Local based analysis might be better for local communities rather than trying to get all the data (top-down and bottom-up) in one centralized place.
- What is this paper's takeaway for the work of our cluster?
    - Data management practices and how they connect with communities?
    - What repositories currently could connect with or hold CBM data, perhaps with a change of policies?
    - Specific recommendations for integrating qualitative and quantitative methods; and raising greater awareness of the former with the earth science community
    - Suggestions could be included in the blog post
    - General observation: Concrete strategies identified that could potentially build on the work of our paper

May 18, 2022 Cluster Meeting

Participants

- Megan
- Arika
- Jonathan
- Ana (back at U Maryland)
- Rupu
- Karen Moe
- Agencia Espacial Mexicana - Adrian Guzmán - AEM (Aztechsat NASA-BOEM; OGC)
-

Agenda

- Quick intros
- Cluster check-in & business
    - Problem Statement Paper
        - Media piece for outreach to the ESIP community (led by Allison Mills)

In a nutshell, the ESIP blog is about being a bridge -- between ESIP collaboration areas, between our volunteers and partner organizations, and more broadly to the Earth science data community. That means we're still a fairly technical media space, but we use the narrative style, conversational tone, photo and graphic rich layouts, and other media features we associate with blogs to help us reach a broader audience. Every blog is also a vehicle for a larger purpose. Here are some examples: celebrating a cluster's process and insights, recruiting participants for an event, encouraging applications, sharing a new tool, paper, or article (this one was co-released with USGS) and coordinating a news release with multiple orgs.
Morgan and I plan to talk about this more in-depth tomorrow, but I see the Community Resilience Cluster fitting into the "sharing a new tool/article" zone. What we'll want to think about specifically is who would benefit from this tool and discussion, and how do we reach them. My two cents: With a fresh DOI, the news hook is strong and could be a good fit for an Eos blog, Anthropocene, Prism, or another media outlet that has an interest in connecting geoscience to marginalized communities.

- Concern: Does our paper have the right audience? General geoscience community beyond ESIP
    - Jonathan cannot speak to media unless he clears it with public affairs office.
- Could we submit our abstract and give presentations?
- Write an op-ed - Maybe Allison could help us with this.

        - Ana: media training to have talking points, messaging is the same for everything - Maybe Allison can help
    - Plan for June & July
        - June: Morgan - Reading group. Reading group: Eicken, H., Danielsen, F., Sam, J.-M., Fidel, M., Johnson, N., Poulsen, M. K., Lee, O. A., Spellman, K. V., Iversen, L., Pulsifer, P., & Enghoff, M. (2021). Connecting Top-Down and Bottom-Up Approaches in Environmental Observing. BioScience, 71(5), 467–483. https://doi.org/10.1093/biosci/biab018
        - Rupu to lead June
        - July: ESIP meeting (skip because of conflict with the summer meeting - Check in with Morgan about presenting during the summer meeting
        - August: ESIP group's peer review of AV's paper on sustainability of earth science data infrastructure (Earth Cube project). AV to invite co-leads
    - Community Resilience Wiki Update(
        - Rupu needs to update email address
    - Cluster planning 2.0 document https://docs.google.com/document/d/1d4IkE_54M-eh5w-OMaUPR3dtXjXj5mNlVbnU9mE_TwM/edit **PLEASE TAKE A LOOK AT THIS ONE MORE TIME**

- **Cluster Call Presentation: Karen Moe- her work with a group focused on air quality (brief presentation)**
- Guiding questions for presenters
    - **Can you describe the community/ies at the center of a project that you've worked with?** For example, what characteristics define this group as a community (e.g. place-based, identity-based, something else)? What was your interaction with them like? What were some challenges/solutions? What were the primary lessons learned from this project/presentation/paper?
        - Town management/leaders (former mayor, current mayor, town council, green infrastructure committee), Cheverly, MD (in Prince Georges county) funded grant with UM purple air network running; data is being used for a specific purpose
        - Inner city, real push for development, env justice concerns (air quality)
        - Electric buses not happening till 2045
        - What do you envision the community doing with the data?
            - They would like to look at air quality baseline; "no baseline so couldn't complain"
            - Who would look at the data? Are they set up to do this?
            - Community advisory board - 2 mayors involved who are a co-leader. No regular meetings yet, but there is an email distribution list. 22 units that have been hosted by community organizations.
            - Who funded the purple air monitor? The town did –wrote a grant to the university who funded (presumably with State funding). Money

was used to purchase units and air quality monitors. Citizens are collecting the data.
        - They need help with the dSata analysis part, including need for funding (on the regulatory side)t. To provide results to 1. city planners, and to the 2. community at-large (two audiences). For the community at-large: educational units for K-12. How have other people moved forward these Purple Air projects. E.g., EPA funds this stuff.
        - Is there a way to engage the community members who are interested in being liaisons between the city and community, Who knows how to present this information?
        - What is the goal? Use electric buses.
        - How to evolve a process like this? Getting people engaged.

    - **Can you describe different ways that people with ESIP-like jobs (e.g, earth science data professionals, earth/data/information science researchers, independent contractors) interact with place-based communities?** For example: What roles did they play, What kinds of projects did they do, How did they build those ties with the community?
        - Karen has been sitting in on the planning board meetings.
        - Air quality cluster at ESIP. She has presented this project there. Hackathon with Chevelry and Los Angelos. Steve Young with Innovate–they've offered to host the system.

    - Here is a draft of our Problem Statement for the Community Resilience cluster (currently in review). From your perspective, is there anything that you might add to these ideas?
- Next steps
    - KM will share one-pager
    - JB will share it with his colleagues in another cluster
    - Plan to have to KM back so we can continue to brainstorm how the CR cluster can support the use case
    - Revisit post-reflection questions below as a cluster
- **Post-meeting reflection questions**
    - What about this meeting topic most interests me/most relates to my work or what questions does it leave me with?
        - **Arika: It gave me insight into the community-type needs that Earth Scientists have. I think that we should have more guest speakers!**
    - How did today's meeting help shape what goals the Community Resilience might set in the future or a specific activity we might take on?
        - **Arika: I can see how we might offer Community engagement support for earth science initiatives. It was interesting to see that Karen had**

gone to the Air Quality cluster (presumedly for domain area expertise) and then came to our cluster for the community component.

- **I also note that there are three different types of community approaches being used in this project:**
  - **Community organizing (agitating)**
  - **Citizen science (air quality data collection)**
  - **Community building (creating the advisory board and probably other groups)**

- Based on the above, what follow-up actions should we take? (maybe spins off a new meeting agenda or speaker…)

April 20, 2022 Cluster Meeting

Participants

- Morgan Wofford, ESIP Fellow, UMSI
- Rupu Gupta
- Zachary Robbins
- Andrea Thomer
- Arika Virapongse
- Jonathan Blythe
- Megan Carter

Agenda

- Quick intros
- Cluster check-in & business
    - Objectives & goals
        - Community data and community resilience merge is an opportunity to review cluster's objectives and goals **Please all comment:** https://docs.google.com/document/d/1d4IkE_54M-eh5w-OMaUPR3dtXjXj5mNlVbnU9mE_TwM/edit
        - Add a section on milestones to fit with ESIP's one pager
            - Plenty of time to work on this for ESIP, no set deadline
            - Try to finish by early May
    - Paper is on it's way to publication: https://www.frontiersin.org/articles/10.3389/fclim.2022.761499/abstract
    - Blog post that highlights our article: https://aea365.org/blog/epe-tig-week-evaluators-as-data-shepherds-by-rupu-gupta-and-arika-virapongse/
- Plan for May
    - Morgan to lead reading group
    - June meeting - Arika will not be able to attend
- Reading group: Colten, C. E. (2016). Environmental Management in Coastal Louisiana: A Historical Review. *Journal of Coastal Research*, 33(3), 699. https://doi.org/10.2112/JCOASTRES-D-16-00008.1
    - The history of the Biloxi Chitimacha Native American community's resettlement efforts: https://link.springer.com/chapter/10.1007/978-3-030-27205-0_6
    - How does my research align to my values? What are my values? What should I do as ground rules in my research? What are our responsibilities in this?
        - We could create principles like CARE: https://datascience.codata.org/articles/10.5334/dsj-2020-043/
        - For examples: ("The new scientist")
            - Pay attention to the composition of your research group

        - Read the historical context of where your
        - Own up to the errors/bias in the work
        - Aim for transparency and access in your work (citation justice, open access)
    - https://datascience.codata.org/articles/10.5334/dsj-2020-043/
    - The guidebook is called Why Am I Always Being Researched: https://chicagobeyond.org/researchequity/
    - https://civiclaboratory.nl/
    -

March 16, 2022 Cluster Meeting

Participants

- Morgan Wofford, ESIP Fellow
- Arika Virapongse
- Andrea Thomer. UMSI
- Denise Hills, Geological Survey of Alabama.
- Rupu Gupta.
- Jonathan Blythe.
- Bar - Lindsay Barbieri
- Megan Carter
- Zachary Robbins

Agenda

- Check-in and business
    - Plan for next meeting April 20, 2022
    - July Meeting session planning
    - July ESIP Meeting in Pittsburgh (submissions due 4/29)
    - Who's going: Denise, Morgan, Jonathan, Andrea (?), Bar
        - Who can help from a distance:
        - Ideas based on notes in Feb meeting
        - Discuss session planning more detail in April
        -
    -
- Reading group
    - Hausman, C., & Stolper, S. (2021). Inequality, information failures, and air pollution. Journal of Environmental Economics and Management, 110, 102552. https://doi.org/10.1016/j.jeem.2021.102552
    - Behavioral economics paper
        - Position themselves in the environmental justice movement
    - Model shows that low income communities and communities of color with the same lack of information are more likely to reside in communities with pollutants
    - Assumptions that are problematic
        - Rational actor model
        - Assume that there is housing choice
        - Low information
    - What does information even mean in this article? What does the mean for policy practice? They claim that their main conceptual findings is: a lack of or mistaken information may exacerbate disproportionate pollution exposure (and resulting welfare loss) among low income households and people of color

    - Take-away/actions from the paper: How can modeling techniques help us examine how federal investments contribute to community resilience. This is coming from acknowledging that there is a lot of federal investment in creating datasets and tools to impact community resilience (e.g., NOAA resources), but we don't know what impacts (social, economic, cultural, environmental) actually happen in the places where they are used.
    - What tools could/should be created for prospective homeowners and renters? E.g., What questions should a homeowner ask around environmental pollution/risk? Can the real estate and building industries work some of this information into the typical information they already provide that goes into homeownership decision-making (listing, house assessment)? Also consider renters?
    - Market failures, like the one involving housing choice, can be addressed through government regulation. The regulation then "fixes" the market failure, and you can rerun the model with the new ideal conditions to evaluate the market, like they did in this paper. A typical regulation may involve addressing the information gap, like those disclaimers you see on everything in the store these days (this product uses a chemical known in the state of California to cause cancer). You could require the real estate market to put this kind of disclaimer on the real estate listings, that hopefully all the people would see before they decide to purchase a home. Equal Housing is already a regulation addressing the choice issue, so I think if you dig into it, there is already quite a bit already on the books to address this kind of market failure. However, the information issue is a good one and suggests possible fixes that could be proposed and evaluated and put into law.
- .
- .
- .
- .

Planned sessions for 2022

- March 2022 Meeting: Reading group around this article: **Inequality, information failures, and air pollution** https://www.sciencedirect.com/science/article/abs/pii/S009506962100108X?casa_token=kdcB[…]kgbEzoAxBwQuBmopoK0-EpG7Sih-u2SEoGormBaDTsyoJ8jMoeIrBZzF58 - Andrea
- April 2022 Meeting: Jonathan Blythe
- May 2022 Meeting: Morgan - Participatory based research
- June 2022 Meeting: Karen Moe: Air quality & communities
- [July: ESIP meeting (skip because of conflict with the summer meeting]
- August: NA
- September 2022 Meeting: NA
- **October 2022 Meeting: Arika Virapongse - ESIP group's peer review of AV's paper on sustainability of earth science data infrastructure (Earth Cube project). AV to invite co-leads**
- **November 2022 Meeting: Zachary Robbins**
- **December 2022 Meeting: Plan for January ESIP**

February 16, 2022 Cluster Meeting

Participants

- Morgan Wofford, ESIP Fellow
- Denise Hills, Geo Survey of Alabama, ESIP VP
- Jonathan Blythe, BOEM
- Tim Bailey, Watershed Research and Training Center, Eureka CA
- Andrea Thomer, UMSI
- Arika Virapongse, Middle Path & Ronin Institute
- Megan Carter, ESIP
- Lindsay (Bar) Barbieri

Agenda

- Discuss joint cluster goals
    - Schedule upcoming meetings - propose topics
    - Community data cluster
        - Draft of blog post ready for next meeting
        - Working with communities in Flint to understand their data needs with Steve Diggs
        - Systematic analysis of data and whether it was fit for use
            - Mostly the data were not fit for use
            - EPA data may be subject to different management requirements than agencies such as NOAA and NASA
    - Denise Hills Comment: Steve Diggs is still trying to stay engaged with Flint residents. We're keeping that work in mind with our work with the CODATA Task Group, Improving Data Access and Reusability (IDAR) that he and I co-chair along with Dirk Fleischer and Shaily Gandhi
    - Community data projects in other clusters
        - Air quality cluster
        - Disaster clusters - wildfires
        - Data stewardship
    - ACC cluster (Ag & Climate Cluster)
        - Making communities aware of data that are available to tell the longer stories of climate change; How do they engage in data?
    - Challenges:
        - What are our skills that we have to actually tackle these challenges? (Know our lane–your strengths)
        - We should scope out the landscapes.

        - Could the ESIP Program Committee help to align/define these, and help prioritize?
        - What can we actually achieve with our bandwidths, time frames, etc. It seems like the most we can do is make each other aware of things.
            - ESIP is often a place to share methods.
        - We need to have long-term engagement–not just urgencies.
    - Problem statement: How earth climate data can be relevant community resilience.
- Upcoming meeting topics (See above). Let's come up with a few questions to guide the sessions (also see above):
    - What are leading practices for data management to improve how Earth Science data can benefit community resilience?
    - How do you define communities in the scope of community resilience? (In the perspective of your topic/work)
    - How do you (in your job) interact with or aim to benefit communities? (e.g., What roles do they play? What kinds of projects did they take on? How did they build those ties?)
    - **Ask speakers to review our problem statement.**
- Environmental justice collaboration - ESIP and NASA
    - We are partnering with @NASA in an effort to expand access to NASA #EarthScienceData in service of furthering environmental justice.
    - We are looking to contract with a subject matter expert (SME) who understands environmental justice stakeholders and communities along with their data needs and challenges. Together with ESIP, NASA, and a facilitation consultant, the SME will assist us in identifying and engaging a diverse group of participants in a series of three meetings to:
        - Identify the types of data needed to address the challenges they are focused on
        - Provide a range of NASA tools and data for evaluation and feedback
        - Make recommendations to NASA on how to make their data more accessible and actionable by the various stakeholders.
    - The SME will be paid $10,000 and the duration of this contract will be six months. Participant recruitment will be an open process and each participant organization will receive a $2,500 stipend. The meetings will take place in April and May with 15 active participant organizations and up to 30 additional observers.

December 15, 2021 Cluster Meeting

Participants

- Arika Virapongse
- Marion McKenzie
- Rupu Gupta
- Morgan Wofford, Community Fellow
- Megan Carter
- Christine Gregg
- Bar - Lindsay Barbieri
- Zachary Robbins
- Jonathan Blythe

Agenda

- Welcome Morgan!
- Housekeeping:
    - Wiki: Jonathan has been doing it; Morgan will update it
    - Agenda: Rupu creates it & sends it around for feedback; Morgan disseminates
- Discuss joint cluster goals
    - Community data and community resilience joint goals
        - Because Andrea isn't here we might want to discuss this during our next meeting.
    - Andrea's update in slack: she has hired a students and they are making great progress on Community data goals
- Identify tentative plans for 2022
    - We take turns leading meetings, such as in pairs
        - Sign-up sheet for monthly meetings and decide topic
    - Have a mixed schedule, for example (Not limited to these ideas):
        - Invited speakers/panel
        - Discussion groups
        - Reading groups with different members taking the lead.
        - Skip a meeting and visit other clusters and come back and report on it.
    - Use the next year as an exploratory space. What are our goals with this?
        - Understand what other clusters are doing in terms of community resilience, their interest in working with communities, and their needs.
    - Potential outcome: proposal or project addressing the needs of ESIP in regards to working with communities.
    - https://wiki.esipfed.org/Cluster_Plan_Template

    - Benefits:
        - Early career can find additional projects of interest and build leadership skills organizing a session
        - Getting a lay of the land of the broader ESIP community– can be very generative as to how we can move forward as a cluster
        - Spread out responsibilities among the cluster
    - Potential weakness:
        - New people might not feel comfortable leading a session.
            - Potential solution: pair cluster members
        - We might need longer sessions
        - When do we do check-ins about about cluster
        - This could be a lot of work, and it could put a lot of pressure on the presenter
            - Emphasize that it can be informal
            - Optional to lead a meeting
            - Be realistic about readings
    - It would still be good to have a core project that we are working on, for example:
        - A gap analysis or assessment
        - Is there a gap in ESIP on how they manage community dynamics?
        - Exploratory work that can lead to a research project
    - Next steps
        - January meeting - Cancel meeting because of ESIP Conference
        - February meeting
            - First determine joint cluster goals
            - Brainstorm potential meeting topics and sign-up sheet
    - Beef up our presence at ESIP meetings: E.g., have someone going to sessions and reporting back
- Identify goals for outreach/dissemination
    - This will be part of the joint cluster goals
- January Bridging Collaborations Session (Megan)
    - Goal: Make connections between CDI and ESIP with an early career focus.
        - CDI Presenter: https://sites.google.com/view/matthewjurjonas/home
    - An opportunity to make connection with other groups

November 17, 2021 Cluster Meeting

Participants

- Andrea Thomer: Assist. Prof. at U. of Michigan
- Arika Virapongse: co-lead of cluster; Middle Path EcoSolutions & Ronin Institute
- Christine Gregg: Community Resilience Fellow
- Denise Hills: Geological Survey of Alabama, CODATA Improving Data Access and Reusability Task Group
- Jim Coll: Community fellow for Cloud computing cluster
- Jonathan Blythe: Data manager for environmental studies program. BOEM
- Marion McKenzie: Community Data Fellow 2021
- Megan Carter
- Rupu Gupta: co-lead of cluster; Knology
- Zachary Robbins: Ph.D candidate NCSU

Agenda

- **Introductions**
- **Welcome to our 2022 Community Fellow, Morgan Wofford!**
    - Morgan is a second-year Ph.D. student at the University of Michigan's School of Information, looking at how open data moves outside of research communities
    - Morgan's fellowship begins December 1st
    - Morgan works with Dr. Andrea Thomer!
- **Community Data Cluster**
    - Cluster meeting is tomorrow 11/18 from 11am-Noon US Eastern
    - Consider attending if you can to learn more about their work!
    - Andrea & Marion provides update:
        - Last meeting as independent cluster; trying to wrap up from past sessions; hired another student to finish up some work ~20 hours of work
        - Talk through getting some of that work done
        - Chatted with Steve D, and is excited to join the combined meeting going forward
        - Flint water data quality analysis has been the focus; plan = write something short and sweet to give back to the community
        - CG's blog post will add to it
- **Problem Statement Update**
    - Starting to receive reviewer comments
    - Waiting until reviews are all in before we make any edits
- **Ideas for Our Next Steps**
    - Drafting our joint cluster goals (CD + CR)
        - Bar (Lindsay Barbieri) helping getting us together--she's working on bridging between cluster

        - AT: wants to read and learn more from the community; maybe a reading group and discussion group (possible first book: Mutual Aid: Building Solidarity During This Crisis (and the Next))
        - Another option: Numbers will not save us: Agonistic data practices
        - RG: Learning and listening from other people at ESIP
        - AV: Facilitating these discussions with prompts around specific topics
        - CG: so many people interested in CR - good time to start a reading group
    - ZR- we attend a cluster meeting. We have a schedule of who's going to which meeting. Inviting people to join the conversation
        - RG: Maybe a second step? After the reading/discussion group.
    - Progress of our updated one-pager/flyer about the cluster recommendations from the problem statement
        - Do we need a one-pager as well?
        - How do we share it with ESIP and other partners?
            - Allison Mills offered to help circulate with the community based on the answers to these other questions
        - What are the three clusters we want to engage with so as to not overburden them?
        - What are the calls to action / goals for dissemination of the flier/one-pager?
            - Training Earth Scientists to work with communities
            - Building our little community around Earth Scientists who work with communities and/or want to do that better (e.g., come join our discussion group)
            - We need to answer the question: What do ESIPers need? We'd love to hear from you.
            - Denise Hills - data stewardship is definitely interested in CR; Physical samples- some CR there as well
            - Wildfire work: Ag & Climate, Semantic Harmonization, EnviroSensing.
        - Created Outreach/Dissemination materials in a common folder: https://drive.google.com/drive/folders/1HeQRncTdmtfuEUXu1SFh22Bg-zqo58z3?usp=sharing
        - **To do: Clean up our google folder**
    - Why should ESIP people care? What do we want people to know?
        - Lean on the 1 pager- each of those points
            - We can work on making these recommendations more concrete.
    - Goal: Integrate ideas with the Community data + Community resilience integration.
    - Communicating the cluster merger
        - What questions do we have for each other and for ESIP about how to move forward?

        - Remember: Allison Mills offered to help us with tone and communication when announcing this to the wider ESIP community!
- **Community Fellow Blog Post** - group review & discussion prior to publishing
- **Next Steps**
    - Discuss joint cluster goals
    - Identify tentative plans for 2022 during Dec meeting**
    - Identify specific goals with outreach/dissemination
    - Provide CG Feedback on blog post

October 20, 2021 Cluster Meeting

Participants

- Andrea Thomer: Assist. Prof. at U. of Michigan
- Arika Virapongse
- Christine Gregg
- Jonathan Blythe: Data manager for environmental studies program. BOEM
- Lindsay Barbieri (Bar): New ESIP fellow working on Agriculture
- Marion McKenzie (Community Data Fellow)
- Megan Carter:
- Rupu Gupta: Knology
- Allison Mills: Communication manager, working to share ESIP stories

Agenda

- **Communicate with Megan about Rupu as co-chair (Arika)**
- **Introductions** (if new people join)
- **Paper update from Journal**, if any (very brief)
    - Currently in review (ZR checked in about its status)
- **Conferences** (e.g., the Afro-Indigenous conference Arika shared)
- **Community data cluster:**
    - Steve, Andrea, Rupu, and Arika together to get on the same page about combining clusters
    - Andrea provides update: have some things to get done; blog posts about their previous work; Marion to theory vs. reality in community work based on the experience in Flint; Christine to write about the integration; one more meeting CD cluster meeting; AT will start coming to CR meeting; Emilio and Diana interested in the integrated meeting; logistical issues (Slack, email lists, need to make a decision about those); everyone excited about it
        - Support from us for Christine in their writing?
            - What does our joint vision look like? What are our shared goals?
            - Focus on journey/process so CG can start writing
            - How to present the integrated cluster to the ESIP community in prep for the winter session
- **Ideas for our Cluster's next steps**
    - We need to discuss the goals moving forward (next meeting?)
    - Create a one pager/flier to disseminate the recommendations from the problem statement throughout the ESIP community.
        - Marion (and maybe Christine?); will continue conversation on Slack
        - Allison can share once flier is ready
        - What to do with it? (the why?)

                - Who is our audience? Our ESIP community, and like people (Earth Scientists and Data people)
                - What information does an audience need?
                - Why? Legacy document.
        - Collaborate with other clusters (e.g., to use the one pager as relevant to them; other projects)
            - Agriculture
            - Disasters
            - Usage based discovery (Discovery cluster): Changing leadership or hibernating--the infrastructure they are building is similar to an Earthcube project that Andrea is on, so they are looking for alignment. Knowledge graphs. Trying to surface data.
            - Bar would like to compile some info about cross-cluster efforts, will reconnect with MC, and then revisit with CR
            - Sustainable data management cluster: CARE, FAIR, and trust
        - Focus on implementing the recommendations in problem statement (e.g., research project, for which we seek joint funding)
            - Here are the recommendations:
                - *Integrate community into the scientific data pathway,*
                - *Build capacity to bridge science and place-based community needs,*
                - *Reconcile openness with self-governance, and*
                - *Improve access to data tools to support community resilience.*
            - Capacity building of earth scientists
            - “Sell our wares” - to other PIs? Broader impacts for community resilience--boilerplate language
            - This idea will need to be fleshed out more in a longer-term discussion
        - Get more involved in on-the-ground community planning.
            - There is a group that I want to reach out
        - Look for other opportunities to give presentations.
        - Seminar series (to discuss more as a group)
        - Merge the Community Data cluster & Community Resilience clusters (In process)
- **Session**: ESIP session call
    - Nov 8th session deadline
    - AT & Simon Goring co-presenting at ESIP- collaboration potential with CR cluster
    - MM: showcase of successes of different clusters working with different audiences
        - Mini-call for lightning talks -- tell us about your community work
        - Will need to frame who “community” is
        - Who will be there: Jonathan--maybe, Rupu: probably not, Arika: probably not, Andrea-yes, (Christine & Marion maybe--they have a discounted fellow rate; $40), Bar- yes,
        - Webinar series participation across the year
        -

- **Next steps**
    - Discuss the shared goals between CD & CR clusters moving forward (next meeting)

September 15, 2021 Cluster Meeting

Participants

- Andrea Thomer
- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Rupu Gupta
- Zachary Robbins

Agenda

- Introductions (if new people join)
- Paper update from Journal, if any
    - In review; awaiting action from the Journal
- Ideas for our Cluster's next steps
    - 1. Creating a one pager (or something) to disseminate it throughout the ESIP community. Interact with other clusters.
    - 2. Focus on implementing the recommendations in our Problem statement
    - Merging the Community Data cluster & Community Resilience cluster?
        - Community Data cluster would like to be absorbed by the CR cluster. Their core group is relatively small and overlaps with CR cluster. They don't have concrete steps-- their next steps are focused on tying up loose ends (blog post, writing about what does it mean to work with a community--challenges from an academic/gov't perspective). They'll keep meeting until these items are completed. Steve is interested in joining this cluster.
        - (Steve, Andrea, Marion is core group; Karen Moe, Brian Wee, and Ana P. work with or want to work with communities, respectively)
    - The goals of CD cluster (esp writing about what does it mean to work with communities) fits well with our next goals. What skills does the Earth Science people need to have to work with (directly or indirectly) with communities?
    - 3. Getting more involved in on-the-ground community planning.
    - 4. Looking for other opportunities to give presentations.
    - 5. Seminar series
- Revisiting Cluster roles
    - Andrea: No on cluster co-lead
        - She's been submitting abstracts for the Community Data clusters, and can continue doing this. **("Session wrangler")** Abstracts are always around Oct and April.

    - Zachary: No on leadership role in the cluster, but small project (can't get into peak writing-level commitment). Is in last 6 months of PhD.
        - **Can assist with connecting with ESIP.**
        - **Session designer**: Always keeping an eye on this.
    - Christine G.: Will be in the ESIP meetings. 2-3 hours a month--being at our meetings, and participating in projects. She might apply for Community Fellowship, But if not will still be plan to be here.
        - **She can continue doing that.**
        - **She has been doing the links.**
    - Jonathan B.: Would be interested in developing capacity and resilience. Readings and sharing information. Organize it around use cases, eg. specific communities. Will plan to continue attending CR meetings.
        - **He can do our WikiPage.**
    - Rupu G.: Will plan to continue attending CR meetings, and be part of the core group. She can't be a chair. Exploration of community engagement, including grants that we might want to work on.
        - **She can be Co-chair.**
        - **She has been drafting the agenda, and can continue doing that.**
    - Marion: She will not re-apply for community fellowship. But she plans to continue to attend the CD cluster and CR cluster. She's in the middle of PhD, so has time to contribute to project. She's interested in hearing more from people who are working with communities. Maybe we have a session to hear from those groups.
        - **Session wrangler.** At the CD cluster, she was often doing the agenda and carrying tasks over to the next cluster.
    - Megan: There are a lot of different models for clusters. Make sure that people get what they need.
    - Arika: Can still continue the leadership of this cluster. Hands on / real world.
        - **Will continue doing Chair.**
    - Roles ideas:
        - We can also share the leadership roles: Giving everyone specific tasks.
        - We could have a calendar.
- Bystander training discussion (would love to hear more and hopefully get to attend later this month)
- Action items: **Rupu can bullet point more details** about each of the potential next steps (above). So we can review and discuss.

August 18, 2021 Cluster Meeting

Participants

- Christine Gregg
- Marion McKenzie (Community Data Fellow)
- Rupu Gupta
- Zachary Robbins

Agenda

- Introductions (for any new people)
- Cluster Problem Statement Update
    - Targeting submitting the paper for peer review this week
    - Table a conversation about pre-printing when more of the authors are present
- Summer Meeting Debrief/Highlights
    - More of a blur; no specific projects of focus; still looking for collaborative opportunities
    - End of community data cluster (CDC) - little bit of discussion about clusters merging with the community resilience cluster
    - Will need to work on a specific project with CR cluster
    - CDC next steps- blog post; not sure what the end goal of the project will be
    - ZR- CR cluster also gauging next steps
    - When we explain the viewpoint we are coming from- a little bit too abstract. Offer specific recommendations on their work. Add deeper connections with those clusters.
    - As an advocate for the community- not necessarily the person with all the answers but the person advocating for the community through our suggestions and principles. Continually tying back to the goal.
    - How do we make ourselves useful to communities, how do we make ourselves indispensable over the next 10 years.
- CR Cluster goal
    - Helping other clusters
    - Creating bridging role/finding bridging people.
    - Moving from the recommendations to implementation within other clusters work. How the paper can be used in this way.
    - Ideas - go to another cluster meeting, find out what they are doing, and figure out how we can support them
    - Creating a one pager to disseminate it throughout the ESIP community. So that we can build from other people's work. Collaboration Opportunities
    - Draft one pager! -now!
    - Consider audiences - i) ESIP community and ii) city officials for example (plain-text document would be helpful for scientists also)

- **Goal of the one-pager: make ESIP's work more accessible**
- **Next steps**
  - **Share notes from this meeting in CR Cluster Slack channel for discussion in Sep**
-

June 16, 2021 Cluster Meeting

Participants

- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Marion McKenzie (Community Data Fellow)
- Rupu Gupta
- Zachary Robbins
- Andrea Thomer
- Brian Wee

Agenda

- Introductions (for any new people)
- Cluster Problem Statement
    - Update: A brief update for the broader cluster group.
    - Dissemination: Arika is giving a lightning talk of the problem statement for a Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) workshop.
    - Christine's 1-pager poster
- Summer Meeting
    - Any updates since last month?
    - Christine G will be at the meeting and presenting a poster--a larger version of her 1-pager.
    - Brian is running a summer meeting 2.5 hour workshop session. Co-organizing clusters: Ag & Climate Cluster and Semantics Harmonization Cluster. There is a retired firefighter from Boulder, who might be present to help elucidate about how data can be helpful for managing wildfires. E.g., power line at risk from debris flow as a result of wildfires and how that might affect communities downstream.
    - Discovery Cluster sounds like they're doing some interesting stuff with linking data to the intended context of use.
    - Jonathan isn't sure he'll be there
- Collaboration Opportunities
    - Community Data Cluster interest
        - Summary of Steve Diggs' trip to Flint: https://docs.google.com/document/d/17mY5N7zONade6JS4DwKc5TI37qwoTuQOdDXcYVSF8Rc/edit?usp=sharing
        - Flint Do-A-Thon Landscape Analysis: https://docs.google.com/document/d/1OBFH2ydKaO2d8_LXZicQGUnvZVbD-4dNBC8mptGimuk/edit
    - Andrea is co-chair of the cluster

    - They are now working with a data set, and will focus on this data set for a curate-a-thon at the ESIP summer meeting (i.e., creating better meta data to support the data set)
    - Brian: There is a person from one of ESIP's funding agencies who (this week) finished and submitted a 1-pager white paper to the OMB regarding how data can be used to advance environmental justice as per a recent Biden Executive Order. That person was briefed (prior to the drafting of the 1-pager) about intermediary organizations (like ESIP, with a specific mention of the Community Resilience Cluster and the Community Data Cluster) that could provide that linkage between agencies and downstream entities ("end user communities") who could use agency data to advance EJ objectives. Not sure what ended up in the submission from that agency to OMB (chose NOT to ask about what was ultimately included). Biden's executive order: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/
    - Andrea: How to effectively get these projects with communities off the ground? I.e., data feminism.
    - Look at the relationship dynamics and learning that is happening as a part of that data set. Maybe pilot test some of the recommendations in the problem statement.
    - Maybe we should start thinking about consolidating the clusters.
    - Jonathan: Moving beyond Flint might be a good idea
    - September we all touch base.
- Funding Opportunities
    - ESIP Lab

May 19, 2021 Cluster Meeting

Participants

- Arika Virapongse
- Brian Wee (Ag & Climate)
- Christine Gregg
- Jonathan Blythe
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Rupu Gupta
- Zachary Robbins

Agenda

- Introductions (for any new people)
- Summer Meeting
    - Who is attending? Marion, Christine, maybe Jonathan
    - Brainstorming ideas for elevator pitch for CG to share
        - What we do: We seek to improve the connections between Earth science data and communities to support their resilience to change, shocks, and disasters.
        - How we do it: We clarify the relationship between Earth Science data and community resilience, and bridge clusters through interdisciplinary work as advocates for community-focused approaches.
        - Why we do it: We believe Earth science data can empower communities.
        - Our work aligns with ESIP's goal to enhance societies' quality of life, economic opportunities and stewardship of the planet.
    - FYI: This is our current tagline: "The purpose of this cluster is to enhance community resilience through culturally meaningful improvements to data accessibility and informatics tools."
    - **Next Steps**
        - Delve into the elevator pitch more in the paper meeting
    - "Aftertimes" session: reflections contributing to future directions for ESIP (Marion)
        - Bruce Caron - session about moving forward after COVID
        - ESIP clusters have been talking about a need for more community-focused work, so there is an opportunity there for us
        - How groups orient their work to be more community-focused
        - https://docs.google.com/document/d/1EreiGrIPg0iRbiXMhHzVWDc-Ck63pGDnDBoTfUQNH90/edit#heading=h.lixdx8ney7tn
- Collaborations
    - Updates on the email from Susan S about collaborations
        - No updates

    - Opportunity for very focused community level work (Brian Wee)
        - NASA & Forest Service-fire management forecasting
        - Use case from community in Colorado, wildfire prevention plan co-developed with communities (pre-fire/**during fire/after fire**)
        - Landslides after fire, affecting water quality, long-term monitoring
        - Devise ways in which data can be repurposed for mitigation planning
            - How does the Community resilience cluster contribute to that?
        - Trying to ways to use semantic data technologies, once fire is contained, to repurpose and reuse the data
        - How does BW see our cluster's contribution?
        - We could maybe replicate, think of terminologies used in the communities, adapting plans across different communities (so search engines are used more usefully (e.g., terms like precipitation, rain)
        - Seems there are opportunities with Semantics, Ag, Discovery clusters; maybe we can also consider joint proposal development
        - Consider the topic of wildfire as a use case
        - Brian's summer session meeting - workshop on what to develop over the fall
    - ESIP Summer Meeting: Distributed Rapid Collaboration on Disaster related Information Products
    - **Nest steps**
        - BW will send updates on Slack; potentially connect with JB, CG, MM at Summer meeting
- Cluster Promotion - Poster for Summer meeting (drafted by CG) could be part of promotional materials
    - CG has what she needs to move forward.
- Future Directions: What's next after the paper submission in August? (see notes from above in Collaboration)
    - Contributions by Brian Wee (see above)
- Other Topics:
    - Great Lakes Traditional Ecological Knowledge (TEK) Webinar Series (CG): https://umn.zoom.us/webinar/register/WN_I6ocH-aeQ_-ZPdmxq8cL7w
    - MI Environmental Justice Conference sessions are available on youtube in this playlist
    - IARPC Research Plan Priority Area: Community Resilience and Health
    - Goal: Improve community resilience and well-being by strengthening research and tools to increase understanding of interdependent social, natural, and built systems in the Arctic.
    - **Next steps**
        - Review the IARPC Research Plan

April 21, 2021 Cluster Meeting

Participants

- Ana Prados
- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Josh Lieberman (OGC)
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Rupu Gupta
- Zachary Robbins

Agenda

- **Introductions (if anyone new joins)**
- **Changing the time of the meeting (Discussed in the channel).**
- **OCG CFP (Email from Susan S.):**
    - “I had a call earlier today with Nadine and Joshua at OGC about their disaster pilot work and how they would like to engage key folks from ESIP in the work. As you may already know they will be releasing their CFP (Call for participation) hopefully later this week on the effort. They are looking to hold 2 workshops Likely one in the summer and one in September. I wanted to bring the effort to the attention of the Disaster Lifecycle and the Community Resilience clusters first and foremost. There are perhaps other collaboration areas as well, specifically Cloud.
    - We talked about possibly doing something in or around the summer meeting. I told them that with our shortened meeting we are looking to see how tight the schedule looks. We will have a better handle on that in two weeks when our call for sessions closes. With a virtual meeting some of the attraction of an add-on meeting goes away as you aren't leveraging everyone being physically together anyway. I have copied Joshua if you want to reach out directly. Let me know your interest and how we can support further collaboration if the interest is there within your groups. “
    - Most recent CFP: https://www.ogc.org/projects/initiatives/t17
    - Arika sent an email response: “Our cluster would like to learn more.”
    - Josh is here to talk about this CFP from OCG. https://www.ogc.org/pressroom/pressreleases/4450
        - There is a need for decision-making loops
- **Problem Statement Status Check-In**
    - Continue discussing proposal submission to ESIP for funding.

    - See this document about Special Project Funding mechanism
        - Funding outputs/deliverables, not people's time, Registration for conferences, development of videos or training module
        - Brainstorming ideas- re-envisioning the data pathway; they need community input; create a system to provide feedback that's not extractive (a workflow?)
        - A flyer to "actionize" our problem statement, so that it is understandable/make sense for the broader ESIP community
- **Summer Meeting: July 29-31st.**
    - Christine will be going: she will be presenting on cluster work; elevator pitch ready & easy-to-understand bullet points; what is the future direction
    - Call for sessions passed last week
    - If we want to participate: We could present in other sessions.
    - Presenting at the next meeting, and sharing what's next for the cluster
- **Cluster Promotion**
    - Christine: The flyer on where we are going. A synthesis of a mapping of our direction.
- **Next Steps and Action Items**
    - FYI: https://www.michigan.gov/egle/0,9429,7-135-3308_3333-551173--,00.html

March 17, 2021 Cluster Meeting

Participants

- Ana Prados
- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Zachary Robbins

Agenda

- **Introductions (if anyone new joins)**
- **Changing the time of the meeting (Discussed in the channel).**
    - Between 1-2 ET ? This would work for ESIP.
    - Changing the day might also work.
- **Problem Statement Status Check-In**
    - Update on journal selection for problem statement
        - Special issue of frontiers we will be submitting an abstract to next month.
        - Charges due when paper is accepted. (~$1300 max).
        - Otherwise split among co-authors.
            - Can reach out to find other funding sources.
    - Progress!
    - We will be submitting a proposal to ESIP for funding.
        - Simple may be better, generally requires a 2-month lead time.
- **Summer Meeting**
    - ESIP call for sessions
    - Theme: Leading Innovation in Earth Science Data Frontiers
    - Session proposals due April 16 (Initial submission).
    - Then between then and May 21st work with consultants to improve your proposal.
    - Summer meeting July 19-23 (virtual)
    - We could aim for a poster submission also.
    - **Posters can be lots of things.
    - Rushing to develop vs. Getting feedback, and marketing the cluster.
    - 60 minute sessions are an option.
    - We will do a poster! Christine and Marion will be attending, Zachary is a no (likely), Jonathan in unsure, Arika is probably a No (unless a specific reason comes up). Ana Prados might go.

- **Cluster “Marketing” / Who We Are and Where We’re Going**
    - Audience - *Who are we marketing our cluster to? Are we looking for new members, new collaborators, or both?*
    - Review draft cluster informational poster/brochure - focus on content
    - Looking for funding. Ex: Creating content (brochure,others).
    - Christine has put together a poster/brochure
        - Bringing together things from the problem statement and the wiki.
        - The impact and activities sections need to be defined more clearly.
        - Who is the audience and what is the purpose of it.
        - Where do we fit within the ESIP/data science/Earth Science sphere.
        - Think about vision (perhaps the above), versus the goals (tangible accomplishments).
        - The golden circle. Starting from the why (what we believe), how,what…the why drives the needs.
        - We wanted to state upfront what the goals are in the presentation (those have specific goals statements in them).
        - Why ideas:
            - Prepare, respond and recover to shock/disturbance/disaster.
            - Earth science data focused.
            - Community resilience is key to our survival as people and that earth science is an important piece of that. There is a gap in how communities can benefit from that. Some many problems within communities. Communities are struggling. Regardless of events, what can we do for communities to live better.
            - How can we (bridge building between Earth Science data & application) help communities help themselves live better in this world?
            - Bridge between the data and the communities attempt to live better.
        - Who is the audience:
            - ESIP, Nasa NOAA etc. (Perhaps currently the audience).
                - What could it contribute to the community resilience context.
            - Community resilience is as important of an outcome than other things they might care about (preservation, collection, etc).
                - Changing the time scale to focus on people living today rather than people living in the future (and from researchers to people).
            - Or is the audience the communities?
                - A very large and diffuse audience.
                - Perhaps pick an individual one and scale up.
                - Lots of need from communities, confounding results need for real tangible results.

            - Capacity building for those types of communities
        - This might determine what success looks like
            - Tangible goals/ summary of where we have been.
        - We are discovering the why (from an ESIP perspective)
            - This is the problem statement.
        - Sometimes the root cause is that communities can't help themselves.
            - This might be at odds with other aspects of this vision--systemic issues
            - Structural change problems versus just say a data delivery method.
        - Soul versus the frontal cortex.
            - Why do people do this work? Can we help enrich this.
            - CR: is an avenue to that. How to bring the social aspect into this.
            - Empowerment, enabling the use of data.
        - Present a direction that could gather people together (part of their efforts toward something).
        - How to know when you are done as a cluster.
            - Can this cluster never die? (clusters are supposed to achieve tangible ends).
            - What are the concrete things you can do/how will you know you're making progress.

- **Next Steps and Action Items**
    - *What should we accomplish by our April meeting? How about the Summer Meeting?*
    - Ongoing check-ins with other clusters - *updates?*
        - Disasters Cluster - looking for our input/expertise on working with communities
        - Discovery Cluster - definition of Earth Science data may not align with community understanding and needs → refocus on usage based discovery (center our work around how communities use data)
            - How is data created, making it easier to track where data originated, adding context. Rating data. Thinking about data as an intelligence specialist, how is that all pulled together, where does science fit in this.
        - Envirosensing
            - Looking to incorporate best practices, would this be a place we could provide feedback.
        - Guidelines that could help in upstream the data science direction.
        - 508 compliance: a good example for some of things we are suggesting, this is a tool that is already used.
        - How do we incorporate our work into work we are already doing.
        - Perhaps for a while we communicate to other clusters.

- Continued from last month: Needs Assessment Overview (we will pick this up in April)
  - Discussion of needs assessment example from Ana
- Identify opportunities to listen and learn from communities. This could be direct discussions, readings, lectures, etc. *Any new ideas?*

March 3, 2021 Problem Statement and Next Steps

Participants

- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Rupu Gupta
- Zachary Robbins

Agenda

- One pager
    - ZR's fiance'; JB's colleague: requesting his time
- Problem Statement
    - Journal publication
        - Crafting the abstract
        - Sending to editors to see where there is interest
    - Need clearance from BOEM
        - 1 month ahead of time
        - Can be an unpolished document
    - Need to select a journal
        - Seeing where there is interest
        - https://www.frontiersin.org/research-topics/20014/democratizing-data-environmental-data-access-and-its-future
        -
- **Timeline/next steps for completion**
    - **JB to write to Tiffany (contact at Journal)**
    - **AV to check with ESIP about payment**
    - **Session facilitators incorporate their session's feedback into the relevant section (by 3/11)**
    - **Everyone incorporate general feedback into relevant sections (by 3/11)**
    - **JB & CG to follow up with Steve Young**
    - Setting up meeting every two weeks starting 3/11
    - First draft pamphlet/one-pager by March cluster meeting (3/17)
- Future opportunities (to be revisited in a future meeting)

February 17, 2021 Cluster Meeting

Participants (*New Faces!)

- Alexis Garretson
- Ana Prados*
- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Karen Moe (Disaster Lifecycle Co-Chair)
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Rupu Gupta
- Sara Lafia* (Community Fellow - Discovery)
- Zachary Robbins

Agenda

- **Introductions** - Welcome Ana & Sara!
- **Debrief of ESIP Winter Meeting**
    - General debrief - *How did the meeting go? What sessions did everyone attend?*
        - Rupu: Needs of the community; who are the intended audience are for our cluster; people are entrenched in the data aspects of their work; we are really thinking about the application of data
        - Zachary: Other clusters referred to Community Resilience as the link to the society aspect; Looking for facilitation in contacting communities, or getting feedback from communities.
        - Christine: Physical Sample Curation, Disasters, Community Data
        - Arika: Science in the government - how scientists can impact decision-making in govt, articulating how clusters can contribute to specific use-cases, matrix covering how to tie clusters to data use-cases; Community data cluster - moving toward applications of data (within this cluster and ESIP more broadly)
        - Jonathan: Community Data, Discovery Cluster, Citation Cluster. Citation cluster: looked at citation principles to apply to data software
        - Alexis: Museums with physical samples are really involved in their communities; there is a lot of desire for cross cluster
    - Takeaways
        - Listen: Engage in conversations across ESIP (and beyond) to identify collaboration opportunities that impact community resilience.

        - Promote: Assess how we can help bring community frameworks, like the CARE Principles, into the mainstream in the Earth science data community.
        - Reinforce: Solidify our cluster goals and distill our problem statement into a more accessible and shareable form.
        - *Any additional takeaways to add?*
            - Christine: Looking at the applications (not just our goals)--apply our goals.
            - Rupu: Our problem statement is conceptual/theoretical--focused on the information that exists. The next step is how we can apply those recommendations. How does that play out in practice. How can we interact with other clusters to put our recommendations into practice?
            - Ana Prados: She works at NASA with a program that works with decision makers. Resilience is one of her topics. What is the type of data that they should be telling people about. She has been working with state and local gov't.; what aspect of resilience is our focus?
            - Karen Moe: Communicating risk information to the public (collaboration point between Disaster Lifecycle & Community Resilience Clusters), communicating analysis to decision-makers; air quality project example, how do you tell users about AQ- how do you convey that properly?
            - Jonathan- new administration - this team is uniquely positioned to contribute to evidence building that is the current admin's priority and the Evidence act; we will play an even more important role
            - Evidence act- prioritizing open government data from Obama admin; title 2 version by the Biden admin; definition of evidence-statistical information
    - Upcoming Winter Meeting Highlights (2/19)
        - Rupu will be presenting our takeaways from the Winter Meeting
        - Draft Slide: https://docs.google.com/presentation/d/1BB_PYNRcZDqLfwds_QkLSopueu8rvFKmNlkfMwl-yRQ/edit?usp=sharing
        - Revisions?
            - Cross-cluster interaction
            - Applications
            - A little word-smithing
    - New opportunities - *Any new connections/collaborators (people or clusters)?*
        - Ana - decisions cluster that JB and AP led- we are distinctly bridging the data for users; making that explicit as part of our identity
        - Leverage work with NASA, what are our end users' needs related to resilience; help NASA communicate; needs assessment need a 'rebound'

- everything is climate related to NASA. She hasn't done the community resilience topic yet.
        - We have recommendations. How could these actually be applied into a pilot project? This could provide some evidence for the community resilience domain. How can different stakeholders come together around common problems?
        - Zachary - larger outreach of govt users or who the end users are not
        - Jonathan - NASA has an assessment framework, high level societal goals; other observation - network perspective as a way to decode these conversations, would appreciate learning more about it
        - Ana - impact assessment, what do they do with NASA data that they provide;topics of interests, challenges; want to take it to the next level, interested in climate adaptation
- **Administrative**
    - Submit meeting highlights slide by 2/17 at 5pm ET (or 2/18 at 1pm ET at the latest)
    - *Would we like to set up a general timeline for what we want to accomplish as a cluster between now and the Summer Meeting?*
        - March meeting - Wiki and "marketing" updates, making our problem statement more digestible
        - Produce public seminar/presentation of our cluster's session for the Winter Meeting
- **Next Steps and Action Items**
    - Ongoing check-ins with other clusters
        - Community Data - Arika, Christine, and Zachary have attended monthly meetings
        - Discovery is collecting use cases for their next year of the cluster's activities.
        - Connect with Ana
        - Disaster Lifecycle
        - Ag & Climate
        - Public-Private Partnerships: Dave Jones presentation about Ecosystem of ESIP community, including needs assessment of the community and how clusters can contribute to each other's work
    - Turn our session presentation into a public
        - Or into a brochure/PDF slide deck 1-pager
    - Next steps for the Problem Statement
    - Identify opportunities to listen and learn from community members. This could be direct discussions, readings, lectures, etc. *Ideas?*
        - Climate change/adaptation needs assessment - Ana can provide examples

January 20, 2021 Cluster Meeting

Participants

- Alexis Garretson
- Arika Virapongse
- Christine Gregg
- Dave Jones (Disaster Lifecycle Co-Chair), CEO of Stormcenter Communities, dave@stormcenter.com
- Karen Moe (Disaster Lifecycle Co-Chair)
- Jonathan Blythe
- Marion McKenzie (Community Data Fellow)
- Megan Carter
- Rupu Gupta
- Ruth Duerr
- Zachary Robbins

Agenda

- **Introductions (if anyone new joins)**
- **Dave Jones' Intro and Presentation**
    - Sharing more about the Disaster Life Cycle work
    - Bringing into 4-5 federal data sets
    - In our lightning talk- big idea to collaborate
    - Hoping to learn from Comm Res cluster- how can we collaborate with states/local group
    - Ecosystem of innovation- if we have connections/capability to share data for testing, with use cases and real-world users
    - Ruth- suggests connecting with the Community data cluster
    - Same time 1st Thursday at 4 PM ET
- **ESIP Winter Meeting Prep**
    - General discussion
    - Poster has been submitted! ✅
        - Talking point; it's on Figshare
        - https://doi.org/10.6084/m9.figshare.13611191.v1: Zachary (lead), Ruth at 1/27, 6pm ET, Christine, Arika, Rupu will be there and can help switch off
    - Presentation Review
        - Agenda: https://docs.google.com/document/d/1rHQr1blQOjkOmi6JEtPpdHezWFNzCWBhAUAHDfQ40ko/edit?usp=sharing

        - Slide deck review of recent changes (note that only users who have been added can open the slide deck link)
        - Review/revise stated goal?
        - Schedule a presentation run-through -- Monday, January 25 @ 5pm ET
    - Administrative
        - Any updates to Sched?
        - Zoom/Qiqo Chat tech questions
        - Upload slides to Figshare when final
    - Next steps and action items

January 13, 2021 Conference Planning Meeting

Participants

- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Rupu Gupta
- Ruth Duerr
- Zachary Robbins

AGENDA

- Poster
    - https://docs.google.com/presentation/d/1d8OAhk7dcz4IiFA15PdUGNyZiUPbA8yV-qmVW_DedCQ/edit#slide=id.gb1961ec412_0_47
    - Revisiting the goals of the poster
- Slide deck & presentation: Jonathan and Arika have a proposal for a modification on our session based on what we learned from the Facilitation workshop.
    - Session outline: https://docs.google.com/document/d/1rHQr1blQOjkOmi6JEtPpdHezWFNzCWBhAUAHDfQ40ko/edit
    - Potential panel, AV moderator, others panelists
    - Discussion of session format
- Develop of list of what we need to do and timeline before ESIP meeting
- Next steps
    - Poster
        - ZR to submit abstract for poster on 1/14
        - RG to edit poster on 1/14
        - Others to provide feedback by 1/15
        - Submit poster on Tue
    - Agenda
        - Jan 20 is our next meeting
        - Review the session agenda
        - And go through one's part
    - Finalize strategy to share session info with others

December 16, 2020 Cluster Meeting

Participants

- Arika Virapongse
- Christine Gregg
- Jonathan Blythe
- Karen Moe
- Megan Carter
- Rupu Gupta
- Ruth Duerr
- Zachary Robbins

Agenda

- **Introductions (if anyone new joins)**
- **Cluster housekeeping updates**
    - Community Fellow Role
    - ZR- scheduling the agenda of the meeting and the process of that
    - not touched upon (website)
    - Wiki page
        - Go to the webpage and login using orcid
        - ZR walking through the page
        - What sections to retain--Should we keep the link to the monthly cluster meeting
        - Sharing the link to the paper (week before the meeting)
    - Managing Google Drive
        - https://drive.google.com/drive/u/0/folders/1D2LhKlyfN4p3x2wGW58KEogaTLWpN8Vr
        - All Cluster-related materials need to be saved here (instead of on our personal Drives)
        - Standardize labeling system - add date
        - Megan: Work with Megan to make our google drive an ESIP folder
- **ESIP Winter Meeting Prep**
    - General Discussion
        - Sign up for the Winter Meeting on Sched: https://2021esipwintermeeting.sched.com/
        - Do we want to have a poster?
            - Might be good for feedback and/or promoting our session.
            - Could condense material from the slide deck

        - Add questions to poster that encourages engagement with our problem statement and solutions
        - RG to draft the poster draft
        - Internal deadline - 01/13/2021 (Google slide deck)
- Work on Slide Decks: https://docs.google.com/presentation/d/1MVwGQs1p4WU720F0B54IJiP7JYv1E3Nxxf91KejLKaI/edit?usp=sharing
- Next Steps
    - Ongoing - Add comments to each other's slides
    - January (TBD), 2021 - finalize slides
        - If you condense your slide material, put the original text in the slide comments for Rupu
    - January 5-6, 2021 - facilitator training
    - January (TBD), 2021 - record presentations
        - Add your script to the presenter comments of your slide(s)
    - January 13, 2021 - Poster/slide deck (RG) -- tentatively scheduling a meeting
    - Note from Megan - Community data cluster has a meeting on 1/13 at 4pm (ET?)

November 18, 2020 Cluster Meeting

Participants

- Christine Gregg
- Jonathan Blythe
- Rupu Gupta
- Megan Carter
- Zachary Robbins
- Arika Virapongse
- Ruth Duerr

- Introductions
    - Welcoming Christine Gregg, Community Fellow
    - Environmental engineer, remediation field, Detroit MI, cleanup of automotive facilities; work in disenfranchised communities, looking to broaden horizons
    - Popcorn introduction
- ESIP Winter Session
    - Session Overview

Community resilience is key for increasing a community's capacity to prepare for, respond to, and adapt to life-changing events. Earth Science has a considerable role to play in contributing to community resilience, but there are still some challenges that must be overcome to improve how Earth Science data supports better decision-making for Community resilience. This session is organized by the Community Resilience cluster of ESIP.

This 90-minute workshop session will kick off with a brief overview of the Community Resilience cluster's problem statement, focusing on identified challenges that earth science data practitioners may encounter while attempting to support community resilience. These challenges include: inequity, data ethics and governance, scale mismatch, and meeting data needs. Next, cluster participants will lead breakout groups with meeting participants to discuss potential recommendations and solutions for addressing the challenges. This working session is designed to collect input and evaluate the recommendations that the Community Resilience cluster has already put forward in order to fill in any gaps about promising approaches and solutions to include. We also seek ideas on how to implement the recommendations, as well as how we might engage and work with other ESIP clusters to do so.

Arika Virapongse will most likely give the seed talk, but all of the organizers (including Jonathan Blythe, Ruth Duerr, Rupu Gupta, Zachary Robbins) will be present as facilitators and breakout groups leaders.

Format (potentially Zoom)
Structure
Introduction 30 min

- Overview of the Cluster + Extra back up.
    - People introduce themselves in the chat or in the overall notes page
    - Cluster goals etc.
- Overview of problem statement - Arika /All - Slide 1
- Challenges (each of us takes a challenge)
    - Let's not specifically ask for feedback on our challenges.
    - Then each person leads a small group sharing recommendations around each
- Break out session 1--general thoughts-random breakout groups-10 min
    - What are your first impressions? What resonated with you
- Recommendations (maybe present in a slide format) - like a handout
    - Use the chart at the beginning of recommendations section
    - Needs to have the main points - the headings
    - Mentimeter https://www.mentimeter.com/ - use this at the end
    - Let's have a notetaker--tap someone early on to take notes. Four separate documents, so the document isn't jumping (or do page breaks?)
- Mentimeter: Which is the most important challenge?
- Break out session 1
- Report out
- Mentimeter: What is the most urgent challenge?
- Break out session 2
- Report out
- Plan for next cluster meeting.

We will have a session facilitator training session.

Draft 3-4 questions each of the small groups would use to facilitate.
What is missing?
What is the role.

Report out (20 min)
Report out
Mentimeter https://www.mentimeter.com/ - use this at the end- WHat is something that we missed?

- **Goal for next meeting:**
    - **Have slide deck together.**
    - **Have some thoughts about our questions**
- Try to schedule a 5 min pitch - start reaching out to other clusters
- Cluster Housekeeping updates (if any)
- Paper Discussion
    - Discuss updates
    - Targets for next meeting

October 21, 2020 Cluster Meeting

Participants:

- Ruth Duerr
- Zachary Robbins
- Jonathan Blythe
- Rupu Gupta
- Arika Virapongse
- Megan Carter

- Introductions (for new people)
- Cluster Housekeeping updates
    - Megan won't quite make the meeting today
- Cross-cluster opportunities
    - Community data cluster: Zachary attended. They are preparing for the winter meeting.
        - Looking for opportunity for using it as a use case, good group to connect with, action focused
        - Next month book club meeting about feminism around big data issues
        - Opportunities for our cluster to share
    - Ag & Climate cluster: Brian Wee's cluster- resilience topic, related to disasters, fires in CO-; what all goes into decision making around fires and remediation; potential for us to connect with them; lots of cross cutting sharing among groups
    - AV's presentation - what are the biggest challenges to applying data o societal benefit; introduced the problem statement;
        - Other people answered very differently; looking for different perspectives
        - Present - NASA; really liked the paper we shared; well received; see our paper as a part 2 to the 10 rule stuff; earth science-y people, but also business sector
        - AV could share more about the 10 Rules
    - Pitch these topics at the winter session
    - Deadline of 11/5
- Winter Meeting Session?
    - Theme is: Leading Innovation in Earth Science Data Frontiers
    - **Deadline is 11/5**
    - 90 min session
    - We should try and do it
    - Feedback session for 10 Rule (AV) and we could follow up with recs from our paper

    - Try and target some of the other groups- comm data cluster, Ag & Climate sector (exclusively invited)
    - **A session on Societal benefit?**
    - It might help us figure out dissemination of the paper (e.g., flyer)
    - Explore our recommendations
    - Might also help us figure out the next step of our cluster
    - Theme for Winter Session: Leading Innovation in Earth Science Data Frontiers
    - Are their gaps in the way that we are thinking? What did we miss, and how do we implement this across ESIP?
    - What is the new ED (Susan) like: (Megan) New director impressions; non profit guru, metrics based approach
- Data Help Desk (this is actually funded by EarthCube)
    - Idea: Pamphlet of 10 Rules and our recommendations for something like the Help desk. Like an ESIP policy.
    - Ask questions using Twitter for example,or a separate platform; folks who share demos about data usage, Growing libraries,virtual office hours;
    - **RD likes one pager and video options**
    - We haven't been getting questions; ceding content and pushing resources
    - http://bit.ly/DataHelpEGU20: Scroll to contributing and tutorials
    - Next one is AGU- is still far enough out (Dec 7-11 and dec 14-16)
    - https://www.esipfed.org/data-help-desk-at-agu-2020
    - European group (April 2021)
    - Videos
- https://docs.google.com/spreadsheets/d/1P9fRDw1s-kSk5v4EFK3k3Qpi1eRIuosUCF3NAaUkRyo/edit#gid=1866639534
-
- Feb Cluster Telecon is also an option to continue any conversation that starts at the Winter meeting
- Paper Discussion
    - Discuss updates
    - Targets for next meeting

Goal for Oct 28th: draft responses to these questions:

- Session Title: Seeking Solutions: Improving the application of Earth Science data for Community Resilience

- Session Short Name: Seeking solutions: Earth Science for Community Resilience

- Session Description:
  Community resilience is key for increasing a community's capacity to prepare for, respond to, and adapt to life-changing events. Earth Science has a considerable role to play in contributing to community resilience, but there are still some challenges that must

be overcome to improve how Earth Science data supports better decision-making for Community resilience. This session is organized by the Community Resilience cluster of ESIP.

This 90-minute workshop session will kick off with a brief overview of the Community Resilience cluster's problem statement, focusing on identified challenges that earth science data practitioners may encounter while attempting to support community resilience. These challenges include: inequity, data ethics and governance, scale mismatch, and meeting data needs. Next, cluster participants will lead breakout groups with meeting participants to discuss potential recommendations and solutions for addressing the challenges. This working session is designed to collect input and evaluate the recommendations that the Community Resilience cluster has already put forward in order to fill in any gaps about promising approaches and solutions to include. We also seek ideas on how to implement the recommendations, as well as how we might engage and work with other ESIP clusters to do so.

- Does your session relate to the meeting theme (Leading Innovation in Earth Science Data Frontiers)? If so, please describe how you see your session relating to this theme.

  Yes. We are hoping to stimulate discussion aimed toward identifying recommendations around improving and innovating upon the contributions of Earth Science data toward Community Resilience. We will seek to identify additional innovative approaches beyond those we present.

- Do you have any suggestions of potential plenary speakers in line with the meeting theme of Leading Innovation in Earth Science Data Frontiers?

  1) Equity and representation in Earth Science may be one of the biggest challenges for the field, since it has great implications as to how people's needs for data are addressed. Ruth Duerr could be a good candidate as a speaker on this topic.
  2) Data literacy: This topic touches many dimensions of the ESIP mission (education, data use, etc.). A speaker who could specifically address the many ways data literacy manifests, based on the needs of the users would be very welcome.
  Fom Jonathan: I think data literacy is a good ice-breaker because people immediately 'get it,' it touches many dimensions of the ESIP mission (education, data use, etc.), and it's not as controversial as the other problem statement challenges. Could probably find someone prominent in the earth science field to speak to this.

From Rupu: I support Arika's suggestion about a speaker about equity in data use. With that in mind, Ruth Duerr is a good candidate :) +1

- Type :
  - Breakout Session: presentation-style session with multiple speakers sharing lessons learned, a new tool, or new initiative.
  - Panel Session: panel-style discussion with a group of experts who represent different perspectives on a common topic.
  - Workshop Session: classroom-style session to teach attendees; hands-on, limited use of slides.
  - **Working Sessions: roundtable-style session where attendees work together on a specific problem**

- Describe Your Target Session Audience

  Are there certain professional roles, facilities, agencies, collaboration areas, etc. that you would most like to engage during your session?

  Seeking broad participation from the ESIP community. Outreach will be made to particular clusters, such as the community data and discovery clusters.

- Session Audience: consider your session as a pool of knowledge - will your session let folks skim the surface, **jump in**, or take a deep dive?
- Focus on getting people talking, to get people to contribute,
  - Need to think about the forum.

September 16, 2020 Cluster meeting

Participants:

- Zachary
- Arika
- Jonathan
- Ruth
- Rupu
- Megan (briefly)

Agenda:

- Introductions (if new people join)
- Update from Megan
    - Calls for sessions
    - Deadline Nov 1
    - Leading innovations in ES data , virtual meeting, Jan 26-28, one 90 min session; complementary content in Feb Cluster telecon meeting
    - Follow up session in Feb to grab those folks and bring them into your sesion
    - First time being intentional
- Cluster Housekeeping updates
    - Website now up to date
    - ZR to be with the group by the end of the year (and hopefully beyond-zr)
    - Shared opportunities
    - May have another Community Fellow next year
- Cross-cluster opportunities
    - Community Data cluster
        - Steve is very interested in joining the two groups
        - Have a joint meeting with them to explore opportunities
    - JB sharing more about a session he attended
        - Concepts of resilience very applicable there
    - AV invited to present at AiAA (NASA organized)
        - DIKW pathway is part of the paper
        - Can draw community resilience authors into an integrated approach
- Next topic after the paper - Flyer to distribute to our networks
- RD contacted by NASA to help them envision a cross-division data discovery system that's more public friendly; RD may become a contractor with them
- Paper Discussion
    - Discuss updates
    - Continue streamlining paper
    - Targets for next meeting

August 26, 2020 Cluster meeting

Participants:

- Arika Virapongse
- Zachary Robbins
- Ruth Duerr
- Rupu Gupta

Agenda:

- Problem Statement
- Anything else?

August 19, 2020 Cluster meeting

Participants:

- Arika Virapongse
- Jonathan Blythe
- Zachary Robbins
- Ruth Duerr
- Rupu Gupta

Agenda:

Introductions/ice breaker

Cluster Housekeeping updates

Cross-cluster interaction updates (if any)

- Ruth & Jonathan attended Community Cluster: they are focusing on the use case of Flint, MI. Will have an ideation event at the Winter meeting. Then in summer they will act on the idea that they settle on. Black Lives Matter has an organizer on the ground in Flint, so they are trying to connect with this person/group.
- Discovery Cluster (Jonathan attended)

Recap of the Summer Meeting

Paper:

- Discussion Recommendations: Community resilience data center certification. What are the levels of a data center? I.e, People using a data center for the purpose of community resilience.
- Incoming ED Susan Shingledecker of ESIP used to work for National Governors Association

What's next?

- How do we act upon the "results" of our paper? Maybe the findings of the paper will help us identify our action items. Example: A pamphlet that can be spread around (e.g., at help desks).
- We could act as a liaison between "end users" (e.g., NGA) and ESIP. Adding applicability to ESIP's tools.
- Thinking on accessible things that we could do as a group

August 12, 2020 - Problem statement meeting

Meeting with core group of authors for Problem Statement

Arika
Jonathan
Zachary
Ruth
Rupu

Agenda

- Discussion of Problem Statement
    - Priority setting/reorganizing
    - Next steps for authors
    - Planning for next open meeting

July 8, 2020 Cluster Meeting

Arika
Jonathan
Rupu
Zachary
Ruth

- Poster Submission for ESIP Summer Meeting
    - Done
- Discussion of Problem Statement
    - Is the train metaphor helpful?
    - Other sections
        - Scale mismatch
        - Can we add the pieces that are missing?
    - Creating a more streamlined paper
        - Grounding it with community resilience
        - Reorganizing sections

July 1, 2020 Cluster Meeting

Arika
Jonathan
Rupu
Zachary
Ruth

- ZR's Poster Discussion/DIKW segments
    - Using new revised DIKW diagram with W as steam
    - Discussion of DIKW definitions
        - What is data? Contradictions between what counts as data for established scientific community and indigenous communities
        - Can be inclusive to incorporate ethnographies as data
        - Extractive and regenerative goals for using data and information
        - Transdisciplinary model (ideal case scenario)
        - CARE principles as an example of the solutions
- Problem Statement
    - Looking at the various sections
    - Incorporate public trust into data and information pathways into sections
    - Train diagram that JB put together
        - Vivid image
        - Steam integral to train, hottest part
    - Next steps
        - ZR finalizes poster
        - JB works on refining diagram
        - RG to write up a draft of the integrated model

June 24, 2020 Cluster Meeting

Arika
Jonathan
Rupu
Zachary
Ruth

Problem statement discussion

- Jonathan's email
- Reorganization of paper including introduction
- Reducing text (removing poverty trap, rigidity)
- Discussion of adaptive cycle and DIKW pathway
- Adaptive cycle figure to discussion
- DIKW pathway in introduction
- ZR's poster for ESIP
    - Right before the next monthly meeting
        - 8th July ZR will share a poster draft
    - Conceptual diagram ready at that point

June 17, 2020 Cluster Meeting

Participants

Arika
Jonathan
Rupu
Zachary
Ruth
Karen Moe, from Maryland (Disasters Lifecycle Cluster)
Megan

Agenda

- Introductions/ice breaker
    - Name, location, plans for Juneteenth?
- Cluster Housekeeping updates
    - Wikipage updates
        - Started putting together resources
        - Reassembled, and no updates since last time
        - Bibliography set up by ZR - for others to share resources to add
    - Slack
        - Continue to do weekly check-ins
- Cross-cluster interaction updates (if any)
    - Status of slides to represent cluster: Rupu will take this on this month
    - Discovery cluster (Jonathan)
        - Encourage our cluster to participate in the breakout session they have planned
        - Opportunity for us to present a use case
        - Over a period of 4 weeks (rolling with international participants)
        - Schedule for July: https://2020esipsummermeeting.sched.com/
        - Attending ESIP: Jonathan, Zachary, Ruth
        - Megan walks the group through the virtual platform for posters. Presentations for the summer meeting
        - Poster option for the meeting on hold for a moment
- Problem statement discussion
    - Main issues:
        - Connecting Adaptive Cycle and DIKW (Intros to each sections)-ZR
        - Rupu can take on the idea of Data and what that means
        - Arika: What conceptual framework should we keep?
        - Zachary - each of the challenges, definition of what the challenge and how does that fit into adaptive cycle?, also drafted what Wisdom is

        - Ruth- Glad that ZR added that; may have to change things slightly; RD just watching
        - Jonathan - reviewing and happy about the progress
        - TImeframe for completion - before Winter meeting
        - Discussion of Adaptive cycle diagrams
            - Potentially making DIKW secondary to the adaptive cycle
- Next Steps
    - Meeting next week (Wed, June 24, 4-5.30pm ET/1-2.30pm PT)
    - Discussing and brainstorming about conceptual model

May 20, 2020 Cluster Meeting

Participants:

- Arika
- Ruth
- Jonathan
- Zachary
- Megan
- Rupu

Agenda

- Introductions/ice breaker
    - Name, location, last thing you did when you spent time outside
- Cluster Housekeeping updates
    - Wikipage updates
        - Reorganized website
        - Condensed 2019 stuff, and adding 2020 stuff
        - Will send an email about the resources
    - Slack
        - Active on Slack
        - Helping move forward the paper writing process
        - Ruth has a question about the weekly report on Slack
        - **Arika: Add topic to Slack for Community Resilience. Done!**
- Cross-cluster interaction updates (if any)
    - Discovery cluster use case (Jonathan)
        - Attended an interested session in the winter ESIP meeting (in person)
        - Data use documentation - people interested in a common topic; re-initiate the discovery cluster- how do we use knowledge graphs for discovery of data?
        - Engaged with people in the group, tuned in, and brought it into the problem statement; knowledge graph
        - Section on knowledge challenges; possible symmetry;
        - Very active, will have a session in the summer- can you send use cases for the hackathon session; example from a specific practitioner or application; and how would they like to find useful datasets; idealized localized cases? JB sent Problem statement; Chris from NASA wrote back with interest
        - JB, RG, AV- could draw from our problem statement (may be most efficient) or bring in outside data with other partners
        - Ruth- post wildfire responses; have the data; form called REEF (?); external activity

        - Here are the use cases that have been shared by various groups thus far
            - Discussing the use cases and their goals
            - Use cases an opportunity for us to identify problems/issues for which we need to use data
            - Cross-cluster collaboration opportunity
            - Air quality could be an option to highlight
        - **Rupu: Will take a lead on a slide that represents our cluster**
        - Megan - Discovery cluster will meet on 5/21 to discuss their main use case, and some others that can be posed

- Problem statement discussion
    - Main issues:
        - Conceptual diagram (AV)
        - Wisdom (RG)
        - Dissemination strategies--in the Challenges (RG)
        - Co-production of knowledge. CARE principles need to be mentioned. https://www.gida-global.org/care (RD); has broad applications beyond indigenous communities
        - Initial - concept of adaptive cycle around DIKW pathway
        - Case studies are some part of the cycle
        - Could the CARE principles help integrate the Wisdom piece of our problem statement?
        - How can we address each stage of the cycle into the challenges/solutions we describe?
    - Outstanding comments
    - Individual assignments
        - **Arika: Work on conceptual framework**
        - **Jonathan: Dissemination strategies**
- Plans for the summer (if we have time)
- ESIP summer meeting registration is open
    - **Megan will share link**

Apr 15, 2020 Cluster Meeting

Agenda

Participants

- Arika
- Zachary
- Megan
- Sean
- Rupu
- Jonathan
- Erin

- Introductions (if any new people)
    - Sean
        - Was involved in ESIP years ago
        - Geospatial focus
        - Startup world, data analytics startup is where he's working now
        - Covid data hub is what he's working on now
        - Steve Diggs mentioned this cluster

- Cluster Housekeeping updates
    - AV took a look at the wiki page and was wondering about updates
    - JB- stopped updating it
    - ZR was in charge of it at some point; he can add notes from last meeting
    - JB has idea for the bibliography
        - Resources in general
        - Also for the problem statement, if that' feasible
        - Paste key references (that we always think about) to a shared document (ZR can do that and update the references)
        - MC will help ZR simplify the process
        - ZR will lead the charge there
    - Moving everyone to Slack for communications moving forward

- Blog Post
    - MC says we need more higher res images; lovely post
    - ZR has no capability of doing that
    - JB can work with cropped images, if ZR sends (will hold off for now since it's been resolved in discussion below)
    - Technically it's live, not seen by anyone yet
    - ZR - reference to the post in the webinar; prefers to go ahead and publicize the post

    - Link to the poster on figshare to highlight the images
- Presentation for Collaboration Areas
    - Happening on 4/22
    - Put together 3 slides
    - Third slide may be about moving forward, and what we plan to do in the future
    - ZR does a quick presentation
        - Next steps?
        - **Problem statement to wrap up in the next couple of months**
        - MC - still monitoring the situation for the summer meeting; there will be a virtual meeting, even if there isn't one in-person
        - MC says that we've made a concerted effort to make collaborations, and we have a lot to celebrate
        - Paper
        - JB will finish his edits, and then AV, RG, and ZR (early May) can finish it up
        - Weekly check-ins (find a time available, or on a smaller scale, every Wed each of us does a brief report out
        - AV- Can we do a presentation? What are our options?
            - MC we are putting together the webinar
            - Late summer is more realistic
            - Fri is the deadline for proposals
            - JB will be participating regardless
            - ZR will also participate
            - Poster may be the best option, but only if we have something in the works
            - Better option would be low hanging fruit from ZR, JB
            - **Webinar in the summer, winter meeting may be a better focus**
            - Post problem statement - **inject some of our work into the next 5 year plan to affect the future of the federation**
            - **Cross-cluster collaboration - push into what other clusters are doing**
            - ER says the timing works great
            - ZR maybe we can do a presentation in different clusters
            - Another option - guest speakers for our cluster; use cases or solutions; (AV)
            - Maybe even getting guest speakers to join a session in the winter meeting (JB)
            - ZR - can we provide guidelines for practitioners to make stuff accessible
            - Recommendations based on our problem statement are a good start for the guidelines
            - A rating system/certification

        - JB will share standards/operational readiness work already exists in ESIP; ORLs are on the dataset level
        - Data centers for planners
- Cross-cluster interaction updates (if any)
    - See discussion above about this topic
- Problem statement discussion
    - Things to add to the problem statement
        - Certification of Data centers--can they help support practitioners
        - CARE principles - relevant to our second problem statement (public trust in data)
        - Indigenous groups' data - related to place-based approaches; how do we work with them to co-create data in ethical ways
        - Example of Menomonee (Sp?) groups in WI (ZR will share reference/resource)

Next steps

- Problem statement wrap up
- Weekly Wed check-ins
- Cleaning up Wiki page

Mar 18, 2020 Cluster Meeting

Participants

- Zachary Robbins
- Jonathan Blythe
- Arika Virapongse
- Megan Carter

Agenda

- Introductions (if any new people)

- Cluster Housekeeping updates
    - April 22nd we will report out to the larger ESIP community.
        - Our poster last meeting
        - Our continued work on the problem statement
        - Our continued work with other clusters (Community Data Cluster)
        - Our blog post.
        - Be more specific in what it contains ~
        - Asking each group to provide a question? Ask how to collaborate
        - https://docs.google.com/presentation/d/1sfkwZNZGq9GTxIeVkQHB8aq9JArD_yt7CAjf2pYbiYg/edit?usp=sharing Previous Slides
        - https://docs.google.com/presentation/d/1Sci2PSr7jPlJcgrgBuFIoJYLtAtn5ioZuY9WvpSb_tE/edit?usp=sharing
        - ESIP Youtube has the last presentation
        - Interactions with other clusters
        - One clear output of our problem statement: What is a community, what is community resilience, how do you get people data
        - Show other groups how to get to a clear output/problem/action.
        - Specificity
        - This is what community resilience means in the context of COVID.
        - In introduction speak to the relevance of our problem statement in regards to this situation. Perhaps we can use Australian wildfires and COVID-19. Flattening the curve and resilience.
- Blog Post
    - Moving the blog posts forward to be able to attend, report out and point to our blog post.
- Cross-cluster interaction updates (if any)

    - Community Data cluster meeting~ Cross disciplinary collaboration between clusters. What is the overlap? What are these new clusters?
        - Thinking about actionable items and strategic moves to address issues.
        - Pitch them our white paper to see where we can interact.
        - Perhaps at a broader scope then what we are doing
        - Interest in Social Justice in a way we perhaps haven't formalized.
    - Reboot of Discovery Cluster
        - Developing a use case, JB working on that.
        - Could be something we bring into the problem statement
        - Discovery for data use. We are interested in how non-scientists are using data, and they are looking into how to get tot that from the discovery side
- Problem statement discussion
    - Thinking about community resilience in the context of Australian wildfires and Covid-19
    - Is the hook at the beginning that this is the problem and then the future looking where we build up systems in which to create community resilience. We see all the gaps right now (and while those can be addressed) we need to have a forward looking.
    - Data to scientists: We can push around transdisciplinary science; science anticipating its future use
    - We focus on the "scientists to public use": referring to the data-wisdom pathway
    - Not proposing that science is broken or maladapted to sciences needs, but rather is not reaching this potential. Where these other two scenarios in real concrete examples. More about growth than broken
    - What happens after that, scientist to the public is what we are hoping to grow.
    - Being really clear about that and scoping it. Matching together science and the communities who need it.
    - Science needs to be changed. Be forward looking enough. In terms of
    - Pushing for a more transdisciplinary science.
    - Communities can use data more regularly, giving them access to this is important. Without requiring a Phd.
    - The definition of data has evolved along with this dissemination. Data now has a relevancy to everyone.
    - Perhaps coincides with the dissolution of capital S science? Lack of trust/ respect.
    - Open Data Act= is a reflection of these values. Partial a tech issue: data more available. Now we have facebook, culture has changed drastically to what data is.

Action Item:

- ZR: Blog post finalized, slides for presentation.
- Putting together something for the summer meeting
- Themed webinar for that. ~ speaker for integrating science 1 a month. (ZR remember to look into this)

\\

Feb 19, 2020 Cluster Meeting

Participants:

- Arika Virapongse
- Zachary Robbins
- Rupu Gupta (notetaker)
- Jonathan Blythe
- Ruth Duerr
- Kelsey Breseman

Agenda

- Introductions (if any new people)
    - Kelsey - data stewardship cluster; saw poster at winter meeting; ; Environment and Governance Initiative
    - Other members do quick intros
- Cluster Housekeeping updates (if any)
    - Arika shared login for GoToMeeting with Zachary
    - Rupu & Zachary doing a great job following up on agenda drafting
    - Zachary activating the Slack channel
- Blog
    - Zachary aiming to send out a blog before next meeting (1000 words) as a Community Fellow (https://www.esipfed.org/about/leadership/community-fellows#fellowblog)
        - Way to promote what the clusters are doing
        - Question about the possibility of including images in blog (JB)
        - Other blogs have included images (AV)
        - ZR to follow up with Megan about:
            - Including images, if applicable, and
            - How difficult it may be and if we are interested more broadly, how do we promote it? And who does that?
        - ESIP doing a lot to promote clusters' work (JB)

- Cross-cluster interaction updates (if any)
    - New community data cluster update (Ruth)
        - Attended cluster meeting; cluster started a year ago, but meeting was first to the larger ESIP community, Steve Diggs at Scripps Institute, spurred by BLM movement/Data4BlackLives; working with them to understand their data needs, including limited access

        - Attended workshop by Earthcube - hacking together instruments (air quality measurement instrument; art and instrument was part of demonstration)
        - What are the things that ESIP can do for the communities? Working with Flint, MI - SD ready to fly up there and develop relationships, to understand what they really need and understand how to support them
        - ~10 people were on the call
        - AV spoke with SD - if we are so well aligned we should merge; but community data cluster seems more reactive and more hands-on with communities, while ours is more like frameworking; ours is more high-level
        - AV asks if that is still current - RD thinks action oriented/helping communities is more the case, but others in their cluster want to step back and think more broadly
        - Community Data Monthly on the second Wednesday

          https://global.gotomeeting.com/join/857241765

        - Wide ranging discussion, also includes strategic thinkers like Mark Parsons
        - JB - division of labor - SD is at a tactical level, fighting the battles, but we also need to focus on the war (strategy)
        - RD not sure how to balance strategy versus tactical focus
        - JB - we can incorporate into the problem statement the different foci, but also showing the alignment between the two clusters
            - Came up in data literacy section in the problem statement; cannot break down into simple statements
        - AV added data literacy piece to problem statement, xx from LA shared insights on challenges using data, was helping use them (e.g., heat islands); for Boulder, using open city data
- Problem statement discussion https://docs.google.com/document/d/1FuutWuqssXYc7gLRl1zsNAIYwaZ9GlbvxCPtIQ4Duww/edit
    - It is progressing!
        - AV restructured based on earlier work on others; and changed the section headings to reflect the changes
        - RG, ZR described the edits they made
        - New terms to consider “anti-fragility”, or rigidity; and include a statement in the paper that recognizes that we are familiar with the different terms
            - Resource for group- "Antifragile" by Nassim Taleb (from Kelsey)
        - Box with case studies - AV wonders if we should replace it with a case study of a city (e.g., Boulder); ZR suggests changing the scale of the box, that make the contexts and the specific aspects of the work more clearly

linked, maybe with a table; ZR to create a draft of the box, RG to start linking the different components of the box
        - (JB) Adaptive cycle - statement at the onset, about the concept of pitfalls, to foretell the rest of the position paper
    - Review changes
        - Data literacy: This term is used differently by City planners; need to segment and define this better. Check on LA & Boulder
    - Assign new tasks
        - Discussion: Include future actions as aligning to the Community cluster.
    - Next steps:
        - AV to review and assign tasks (based on how the past month's work has progressed) and will ask for people's edits 2 weeks before the next meeting

Jan 15, 2020 - Cluster meeting

Participants:
Zachary Robbins
Jonathan Blythe
Erin Robinson
Ellie Davis
Ruth Duerr
Rupu Gupta
Kelsey Breseman

Agenda and Notes

- Introductions (if any new people)
    - Arika, Jonathan, Rupu, Zachary (existing members)
    - Erin
        - Filling in for Megan, who is not here because she's wrapping up her community engagement piece
    - Ellie, recruited by Zachary (new member)
        - Dissertation research on hurricane and chronic flooding
    - Kelsey (in Seattle)
        - Interested in the concept of Resilience
- Cluster Housekeeping updates (if any)
    - Arika informed group of existing resources and activities
        - Cluster roles
        - Use of platforms (e.g., wiki, slack etc)

- ESIP Winter 2020 Meeting Activities debrief
    - Poster presented by Ruth, Jonathan, Zachary
    - Link to the poster shared by Zachary - Poster Figshare DOI: **https://doi.org/10.6084/m9.figshare.11528526.v1**
    - Set up shop about 5.30, in the hallway, offset to the side, but great location
    - Created a second poster - first poster bled into the second space
    - People started to look at it on Tuesday evening the day before the poster session; interest in it; already familiar with the material, coming back to ask questions; lot of people coming to talk to Ruth
    - Ruth mentioned it was very engaging ; very interested in the concepts
    - One of the comments - how we discussed fragility, introduced the concept of anti-fragility
        - From software development, but for us - some places are less fragile
        - Vulnerability can be another way of looking at it; maybe resistance as well
        - These are “assets” of a community. Eg. strengths.
        - Ellie will send us a graphic that captures discussion of resistance and vulnerability (see below)
        - Different terminologies suggest we have to be careful about the language we use in publications and presentations
        - Anti-fragile = about when things get stronger when “bad things” happen; in times of disaster, community gets stronger (Book: Paradise Built in Hell, by Rebecca Solnit)
    - Catherine B. Cramer commented on poster and suggested connecting with CIESIN @ Columbia University:
        - **We need to look at CIESIN @ Columbia University website to see if there are insights on the problem we are seeking to address** http://www.ciesin.org/index.html
        - The way we’re using the concepts of resilience, we can use them to solve cross-disciplinary problems
        - CIESIN - they do work in this kind of space
    - Mark Parsons: Walked him through the adaptive cycle, interested in the DIKW concept
    - Bob Downs: He may reach out to us, if he chooses to (also suggests connections with CIESIN)
    - ZR: Main takeaway from session is that the definitions and concepts to focus on, which is the conversation we are having in the cluster
- Cross-cluster interaction updates (if any)
    - ZR- **goal is to write blog posts; use the poster to write one, to spur stuff to move forward**
    - Clusters we’ve interacted with -semantics, data stewardship
    - JB- ESIP Winter 2020 session: ESIP Geoscience Community Ontology Engineering Workshop (GCOEW) by Luis McGibbney - Take away: **looking at SWEET and ENVO as ontologies for earth science; for SWEET they are**

developing a white paper for how SWEET can solve real world problems; we can maybe develop jointly with them to develop our problem statement

- ZR- education committee related session, real application for this group, for what community groups are actually doing; that could be a resource Also having community groups design and test ideal tools for themselves.
- RG: Would still like to connect with CLEAN-- focused on climate literacy
- RD: operational readiness level (ORL) that came out of Disasters Lifecycle cluster; we can reach out and do a presentation there, and identify synergies
- ER: thinking about scenarios (could be a disaster scenario) - how do the different clusters respond to that scenario? Data stewardship work could support
- If this group wants to come up with a scenario, it would help the disaster cluster
- ED: Agriculture cluster - fire focused scenario, continue that collaboration and also with machine learning cluster
- AV: bringing the clusters together, people are waiting for that; we can contribute to that; these are the pieces that each cluster can contribute
- ER: thinking about a more active in person session, unconference session; a cross cluster prep as a webinar before that would be helpful to create a stronger session
- **Ellie provides a link to similar activities:**
  - **FEMA tabletop exercise: https://www.fema.gov/media-library/assets/documents/27307**
  - **USGS scenario last year - trying to find link**
  - **FEMA Hurricane Pam summary https://www.fema.gov/news-release/2004/07/23/hurricane-pam-exercise-concludes**
  - **NIH https://disasterinfo.nlm.nih.gov/content/files/Disaster_Research_Response_Report_042816.pdf**
  - **CISA drought response tabletop https://cisa.sc.edu/projects__drought-response.html**
- JB: NASA/ISRO, https://nisar.jpl.nasa.gov/ synthetic aperture radar (SAR) satellite, planning the ground systems, trying to manage the data in the Amazon Cloud; satellite can be targeted for disaster response, for example in the case of an oil spill, it can reprioritize the data processing to process the data collected from the disaster area and get that shared on a quicker turn around (6 hours instead of 12 hours, which is the normal processing time for SAR images) see article: https://earthdata.nasa.gov/learn/articles/getting-ready-for-nisar
  - Question: What about situations that are not as urgent or national priority level? In developing countries, for example, so they can use the data
  - Answer: You can email them to reorder the priority level - there is a separate workflow for these kinds of requests (I wish I had the poster material to be able to reference this ordering system)

- Problem statement recharge

- AV shares with the group and provides a general overview, process
- Poster feedback helpful to refine and re-energize the doc
- Currently a white paper; would like to make it a publication
- Maybe a first draft can be completed before the summer meeting
- **ZB: will integrate feedback into paper doc**
- **RD: Adding example as a box: of indigenous communities; disconnect with science communities; workshop information**
- **AV: will put together a task list, with comments, so everyone can have a task (will do this by early next week and post an update on Slack channel)**
- **RG: Community resilience - what's unique about their needs**
- Invites everyone to Slack channel **Done** (for meeting attendees ED +KB)
- Look in more depth about the term "fragility", in contrast to resistance, vulnerability, vs resilience
  From Ellie:

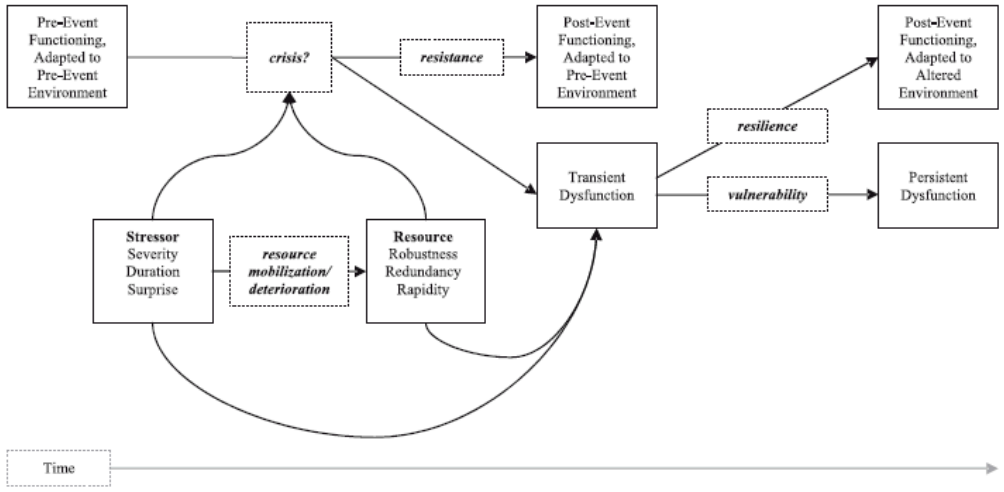


Fig. 1 Model of stress resistance and resilience over time: Resistance occurs when resources are sufficiently robust, redundant, or rapid to buffer or counteract the immediate effects of the stressor such that no dysfunction occurs. Total resistance is hypothesized to be rare in the case of severe, enduring, or highly surprising events, making transient situational dysfunction the more likely and normative result in the immediate aftermath of disasters. Resilience occurs when resources are sufficiently robust, redundant, or rapid to buffer or counteract the effects of the stressor such that a return to functioning, adapted to the altered environment, occurs. For human individuals and communities, this adaptation is manifest in wellness. Vulnerability occurs when resources were not sufficiently robust, redundant, or rapid to create resistance or resilience, resulting in persistent dysfunction. The more severe, enduring, and surprising the stressor, the stronger the resources must be to create resistance or resilience

- Thinking about the different terminology and how different communities use it
- **Timeline until next cluster call**:
  - **Arika send out task list (by Jan 20)**
  - **Everyone works on their specific tasks (by Feb 3rd)**
  - **Everyone reviews the paper overall, particularly looking at sections that others have worked on (by Feb 19th meeting)**

Dec 18, 2019 - Cluster Meeting

Participants:

- Arika Virapongse
- Erin Robinson
- Jonathan Blythe
- Zachary Robbins

Agenda

- Introductions (if any new people are joining)
- Welcome Zachary Robbins
- Roles
    - Zachary approves the description of his roles.
    - Wikipage Zachary. He will connect with Jonathan about this.
- ESIP Winter 2020 Meeting Activities
    - Poster Review and Approval
- Cross-cluster interaction:
    - Any updates? Jonathan may have attended Semantics meeting
    - [Didn't get to this agenda item]
- Cluster Housekeeping updates (if any)
    - Community Resilience Cluster Slack channel
    - [Didn't get to this agenda item]

Notes from the meeting:
Roles: Keeping the wikipage updated

Revisions for the posters:
Poster 1

"Community resilience deals with science and decisions at local scales"

Act 1

"Community resilience deals with science and decisions at local scales"

Modify cultural norms

Remove Acts

Remove colons. On the side of Scientist/ new person no tie, being confused. Remove Gender of “Policy people” ?

Act 3:Using Phases in stages:
Growth, conservation, collapse or release and conservation.

New Idea:
Replace acts with the phases in the adaptive cycle, move it into to figure of the adaptive cycle.
Just a circle with conservation, collapse, release and conservation.
Just name acts: Information challenge

Act2 is now: Information challenge: Bridging the Gap
All acts are now challenges of the Wisdom. Knowledge data.
Strike also in “ Communities have distinct data needs

<u>Poster 2</u>

Remove Problem Statement: Move black text to what's next.
Figure one text is condensed and

Nov 18, 2019 - Cluster Meeting

Participants:

- Arika Virapongse
- Jonathan Blythe
- Megan Carter
- Rupu Gupta

Agenda:

- Introductions — if there are any new people
- Welcome new Community Fellow— Zachary Robbins
    - He couldn’t attend this meeting, but will make next one
    - Megan introduced Community fellows, in regards to what they do
- Cross-cluster interaction:
    - Arika attended Data Stewardship cluster and spoke for 3 min about our cluster; shared problem statement
    - Rupu would still like to connect with CLEAN
    - Jonathan - He will meet with Semantics cluster on Nov 23rd
- Cluster housekeeping

    - Arika created a new spreadsheet for clarifying roles in the cluster. https://docs.google.com/spreadsheets/d/1EAp0LGrTRgfFm9lxgPgXEDsmWEhdJevXGn4UWUS8QSo/edit#gid=0 Purpose of the spreadsheet: we can spread the workload around, help keep the cluster advancing, giving people opportunities for participation in the cluster, and make it easier for people to change roles in the future without it affecting the cluster.
    - Arika updated the Slack channel:
        - Trying to get the Slack channel working as a place for communication. **Everyone try to communicate on it by uploading interesting news you come across; we will also send updates on Slack**
        - Rupu - follow up with Megan to get the url for slack for cluster group
- ESIP winter meeting activities:
    - Zachary developed first draft of poster
    - Jonathan & Arika made revisions
    - **Timeline for poster completion:**
        - Nov 22nd - content revisions to Jonathan (Arika to look on Tues, Jonathan on Wed, Rupu on Thurs & accepting changes to finalize the content)
        - Dec 11th - Graphics person (Russell) will have poster done for our review [Cluster reviews poster from Dec 11-18)
        - Dec 18th (cluster meeting) - Talk about the review for poster during meeting. Intention is that Jonathan has all he needs to finalize poster.
        - Before Dec 31st: Russell sends around final poster for print out.
        - [ESIP meeting is Jan 7-9]

Oct 16, 2019 - Cluster Meeting

Participants:

- Arika
- Rupu G.
- Jonathan B.
- Ruth D.
- Erin R.

Agenda:

- Session for ESIP winter 2020?
    - Deadline this friday.
    - There are sessions on citizen science (e.g., citizen science and data)
    - Maybe join a citizen science session

    - Poster session
        - check the box on registration--will be Ruth and she will present the poster (with help from Jonathan if he can attend)
        - Who is attending? Ruth (definitely going) or Jonathan (not sure if he is going or not); Jonathan has a graphics guy that can put this together; Ruth has been printing on cloth at Spoonflower ($15) but has a 3 week lead time.
        - **Need to get text and graphics to Jonathan for the graphics guy to put together into a poster.**
- Cross-cluster interactions?:
    - Arika sent out a follow up email to the Community cluster after last meeting: No response.
    - Rupu was going to join one of the CLEAN cluster--she hasn't been able to do that yet; but she will keep trying. **Rupu to try to attend: 3rd Tuesday at 1PM MT (next one on Nov 20th)**
    - Should present to Data Stewardship (Ruth leads). **Arika to present our problem statement to the group: 1st Thursday at 2PM MT (next one on Nov 7th)**
    - Semantics (Luis McGibney). **Jonathan to present our problem statement to the group: 4th Tuesday at 4PM MT (next ones on Oct 22 & Nov 26th)**
- Problem statement
    - Jonathan wants feedback on diagram
        - Novelty of the figure: community resilience and DIKW pathway concepts brought together.
        - Arrows instead of dots (Ruth)
        - Gap between where data is available and who is using it.
        - Focus on the gaps (including poverty gap) arrows in a circle"
        - Extend last two circles into the information area
    - Narrative on figure, reenvisioning is better put into the solutions seeking section. Either move it or delete from the introduction.
- Other updates:
    - Arika responded to ESIP (Megan) that our cluster is interested in having a Community fellow.
    - Arika will sort out the White paper publication (reach out to the co-authors), because would be nice to have it for a citation in our problem statement https://docs.google.com/document/d/1aB5LlJbbK8O0EBjh5SM31HIW6ojFI7fwoqUhml3gc2I/edit. **Arika to reach out to co-authors**

Sep 18, 2019 - Cluster Meeting

Participants:

- Megan
- Jonathan
- Arika
- Erica Goldman,science policy director from NCSE (National Council for Science and the Environment)

Agenda:

- Paper:
    - Jonathan and Arika talked in-depth about the conceptual figure. Jonathan will work to write a detailed caption, and also think about ways that it might be improved.
        - Arika suggested that the adaptive cycle applied to all four phases of the DIKW pathway - so the diagram will be modified to show this.
        - Arika suggested to focus it on the data pathway for community resilience - how to make this diagram more specific to the cluster and white paper? Perhaps by highlighting particular pitfalls that communities are prone to at different phases of the pathway?
    - Arika will work on streamlining the paper overall (working from top to bottom).
    - Arika and Jonathan generally agreed that moving solutions up into the three main sections of the problem statement was an improvement - just need to work on filling out the narrative connecting these parts to the larger section headings/ streamlining as necessary.
    - Everyone: please also work on the paper in any way that you like
- Any cross-cluster interactions:
    - Megan helped to make the connection with Steve Diggs, and Arika followed up with the question: What is their Community Cluster up to, and are there opportunities to align our clusters? No response yet, but Arika sent a follow up email today after our cluster call.
- National Council for Science and the Environment introduction:
    - Erica G. They are currently trying to set up a new program around connecting their network of universities to a new network of local governments. What could this boundary spanning and matchmaking look like, and what could be their goals? They could be interested in some of the topics that we are working with in our cluster.
    - Discussion regarding Evidence Act and allied federal policies (DATA Act affecting CFO agencies and CIPSEA affecting statistical agencies)
    - Discussion of challenges and initiatives in municipalities such as Boulder and Los Angeles to use earth science data to support decisionmaking.

Aug 21, 2019 - Cluster Meeting

Participants:

- Megan
- Jonathan
- Rupu
- Arika

Agenda

- Paper
    - Rupu will work on discussion
    - Jonathan - poverty trap reference; and working on diagram (making it flow and incorporating real world examples that are easily recognizable)
    - Arika - working across the paper
- Winter meeting?
- CLEAN:
    - Rupu: She has been trying to connect with this group. She's been going back and forth with someone from there. She will try to meet with someone before Sep. She's been trying to connect with Patrick. They are climate focused, and they talk about resilience in a broad way. She wants to know what they mean by resilience, how they engage with communities, and how data fits into it.
    - Megan: Katie Boyd (katie.boyd@colorado.edu) might be a better contact. CLEAN meets once a week, and the meetings are often informal, so it might be easier to just jump into one of their calls (telecons: https://cleanet.org/clean/community/cln/telecon_schedule.html). CLEAN is a well-established group, but doesn't engage with the rest of ESIP. They use ESIP resources (e.g., telecon, community fellow).
    - Arika:
        - Webinar: ESIP (2018, Dec 4) Webinar #6: Building Societal Capacity: The Educational Value of Earth System Science Data, Information, and Applications. Retrieved from: https://youtu.be/dMETDQ0jNlo
        - Presentation: Niepold, Frank; Fox, Sean; Boyd, Kathryn; Manning, Cheryl; Chandler, Patrick; Virapongse, Arika; Pearlman, Francoise; Pearlman Jay; Robinson, Erin (2018): ESIP Webinar #6: Education Value of Earth Science Data.pptx. ESIP. Presentation. https://doi.org/10.6084/m9.figshare.7418075
- Reaching out to other clusters: To review our problem statement
    - **Steve Diggs' cluster: Megan will reach out, and Arika next.**
    - **Rupu attending CLEAN**

- Education committee: teachers workshop, out to lunch, adopting a school; committees have a budget (that clusters don't have)
- Reach out to clusters (laterally) and vertically to leadership or committees. Ruth might have some insight into how what we are doing might fit into the committees. We should be clear about what we are looking for: e.g., problem statement.

June 19, 2019 - Cluster Meeting

Participants:

- Megan
- Jonathan
- Brian Wee
- Arika

Agenda

- Megan: rotating slide deck highlighting clusters; it will be up all week during the meeting and during the research showcase during the summer meeting. She will use the slides that we gave her last time (from Rupu). She will share that (see her email coming out).
- Summer meeting - no attendance
- Winter meeting - Brian and Jonathan will attend
    - Present the paper to the larger community - all-hands - depends on how well it matches with the theme; breakout group might be too self-selecting
- Problem statement
    - Brian Wee's paper - https://eos.org/opinions/a-vision-for-adapting-at-the-pace-of-socioenvironmental-change
    - Think about adding references/citations to existing policies (Brian)
    - All: Work on definitions and general structure of the paper
    - Jonathan: Discoverability and "solutions" sections
    - Arika: Cross-disciplinary and interoperability of datasets
- Where to publish the problem statement: Jonathan noted that ***The Journal of Ocean and Climate: Science, Technology and Impacts*** has a new section on data management.

May 15, 2019 - Cluster Meeting

Participants:

- Megan
- Jonathan
- Ranalda
- Ruth
- Arika

Activities

- Status update of the Problem statement
- Rupu presented in the Data in Action webinar
- Review of thoughts from April 19th webinar
    - Interacting with other clusters
        - Education/CLEAN
        - Community data cluster - reach out to them to ask them to join one of our telecons.
- Ruth: Groups endeavoring to make data more usable and accessible. Would be good to know more about them. They were enabling citizens to address some specific problem to simplify graphs over land maps etc (add to problem statement)
- Very clear about what we mean when we define the problem - community resilience is a pretty specific take on public access - broad dissemination of data. Other groups may advocate around using data. It's a very different problem.
- Problem statement: coherency - how they address the challenges. Here are aspects of this problem and how it can be addressed. Solutions - not the right term, further elaboration of the problem. Organize it with a little model. Categories into an outline. Take a holistic look and make sure it's easy to understand.
- June 5th - everyone finish revisions on the paper, so we can all look at what you've done and revise each other's work before the next meeting.
- Note from Megan: National council for science & the environment https://www.ncseglobal.org/ has clusters (like ESIP)
    - director for science policy asked: how is ESIP getting data to decision-makers? This is an area that our cluster is specifically addressing (more than any other cluster in ESIP)
    - Consider interacting with this group - such as by having them at one of our cluster calls

April 19- Thoughts from the Data and Action ESIP webinar

(Rupu presented about hour cluster in the webinar)

Notes contributed by:

- Arika
- Rupu

Notes

- Collaborating with other clusters (e.g., education, CLEAN is engaging with youth in resilience efforts; contact: Patrick Chandler)
- We need to first develop a clear message of what we are working on (e.g., Our problem statement document) so we can then reach out to other clusters/groups for collaboration and other engagement
- Idea for future cluster meetings: Presentations from other clusters showing how they might align to our cluster goals
- Discuss with cluster to re-visit our goals: Should we pivot toward: Meaningful data use/application for communities? Does that overlap too much with the Community Data cluster http://wiki.esipfed.org/index.php/CommunityData ? What about the Usability cluster? [Is our value and skills best served by helping emphasize “meaningful” and better engagement with communities?]
- However, it is great that we are working on unique ways to build resilience. That is a unique niche for us.

April 17, 2019 - Cluster meeting

Attendees:

- Arika Virapongse
- Rupu Gupta
- Megan Carter

Agenda

- Rupu to do the ESIP presentation this Friday at the ESIP webinar
    - Reviewed her presentation
- Status of the problem statement - How is it going? How to move forward?
    - Needs a link about how the scientific community thinks about stakeholders
    - At the start of paper - write about data for action within the context of climate/community resilience - briefly define this
    - Rupu: work on the box for the case study. 1st week of May to give an update of where things are.
    - Jonathan: work on semantics
    - Arika: Work on re-organization of paper and deepen overall
    - Organization and deepening, and think about what is missing
    - 3rd of May we all contribute text
- Submit Jan 2019 presentations to figshare (Arika)
- Get new GTM link for next meetings- add to wikipage (Jonathan)
- Summer meeting: No presentations from our cluster. Focus on working on the paper. Aim for an activity for winter meeting.

March 20, 2019 - Cluster meeting

Attendees:

- Arika Virapongse
- Jonathan Blythe
- Rupu Gupta
- Ruth Duerr

Agenda:

- Rupu to do the ESIP presentation (webinar)
- Talk about problem statement - what to do with this and how to move forward
- Cluster management best practices

Notes of the discussion:

Webinar

- **Rupu to do the ESIP presentation (webinar) - email**

- 2019 ESIP winter highlights that Arika did on Feb 7th: Our session presentation is at the 48 min mark: https://www.youtube.com/watch?v=fzO8EBaT7qA

Paper

- End use of data - we focused on gaps, but theorize on how to fill those gaps. With intended value-added, in the data space.
- Take some of the content and continue to work on it, so we can have license to do
- Using F1000 or Eartharxiv - a living document publication. Very accessible way to share with people.
- More detail of the gaps and how we can fill them - Add to the white paper
- **Re-working the white paper - Arika will cut and paste the entire paper into the problem statement, so we can re-work it.**
- There is a big shift from community to public science. Consider the different groups.
- Problem statement paper will be place-based. Cluster? There is still value in the organizational community resilience- this can be re-visited later, if it makes sense. Big companies - make sense. Once you go smaller than that, organizational community resilience doesn't make much sense (e.g., family-owned grocery store--too small to do that type of planning).
- Define community at the beginning of the paper. Alot of research on place-based communities, than other contexts. But recognize the organizational context. Maybe this would work in the discussion - we start at place-based community scale, but further discussion requires a more expansive way to think about community.
- United nations (e.g.) community resilience is a core goal - for the whole world. Depends on scale. Look at the development field. We should try to tackle this at the onset.

Cluster

- Add the folder to the wikipage
- **Meet with Jonathan & Ruth about the wikipage**

Feb 20, 2019 - Cluster meeting

Attendees:
- Arika Virapongse
- Jonathan Blythe
- Rupu Gupta
- Megan Carter

Goal for next meeting:

- Focus on an 1-pager by next meeting. Gaps. Literature. Goals. Problem statement. Intended outcomes. Draft to be developed: https://docs.google.com/document/d/1FuutWuqssXYc7gLRl1zsNAIYwaZ9GlbvxCPtIQ4Duww/edit?usp=sharing
-

Agenda

- Reflections/comments about the Community Resilience session at the ESIP winter meeting
    - Aligning with other clusters who presented at the session: Community cluster, Disasters preparedness, and Data to decision-making
    - Rupu: Ways that we can help to support data people. Being culturally responsive and being attentive to our audiences. Can we do some workshops for skill building?
    - Connecting to Brian Wee's provenance session. Asking Brian to join one of our calls. His presentation is on Figshare. Start at 2h9m to access his session.
- Next steps for the cluster:
    - What is our cluster project(s)?
        - Blog post?
        - White paper?
            - Data lifecycle has been overused, but may be able to use this from a community resilience perspective
            - The Federal Data Strategy - "trusted data" - we are not sure how to do this yet - evidence-based decision-making act; policy perspective would be better - local and state level; sensitive data https://strategy.data.gov/ https://www.congress.gov/bill/115th-congress/house-bill/4174
            - **How do communities access and use data?** Articulate our soapbox- transition to public use. We should be place-based. What are our strategies? What are gaps? Consider perspectives from different governance levels. Data also looks very different (formats-how people ingest information) from these different levels. Defining terms. How do different end users use vocabulary? Physical samples - also consider this in terms of data.
            - ESIP is more focused on how Earth Science data can be used by Earth scientists. This federal law focuses on more public use of data.
    - What do we want to do with our monthly calls (e.g., webinar series?)
    - Thoughts about a session for the ESIP summer meeting

    - Have Thriving Earth come in to do a training. Two sessions. Perhaps in winter? Would this translate into the institutional setting?

After ESIP winter meeting notes

- https://collections.plos.org/ten-simple-rules - Write something about engaging between community practitioners and data scientists
- Add names to the listserv
- See email from Natasha about the partnering opportunity

Jan 3, 2019 - Session planning meeting

Attendees:

- Arika Virapongse
- Megan Carter
- Ranalda Tsosie
- Rupu Gupta
- Natasha Udu-gama

- Thriving Earth Exchange - not TEX
- Natasha: Alot of frustration about insufficient data management within communities and cities (Atlanta & DC) - finding the data that they need. How might data communities help other communities overcome such barriers?
- Ranalda: Interested in community engagement and helping connect tribal groups with scientists. What is lacking is the data. They have alot of assumptions but would like to have the data to back it up.
- Rupu: Break out groups: open-ended right now. Role playing idea - not ready yet. We pose some open-ended questions and then the group addresses them. Each presenter be at a group.
- Natasha: What kind of ideas in cross-development challenges? Understand if there are templates or standard operating procedures that could be used.
- Rupu: People are at the session for a reason. How do they tackle community resilience efforts? Might not have experience for both parts of resilience. But have they share experiences.

- Facilitation:
    - What are their experiences with community resilience (earth science data)?
    - What are barriers that scientists coming across in their working relationships regarding community resilience?
    - Who is the community?
    - What is community resilience in their context?
    - What role could a data expert group like the ESIP community play in overcoming these challenges (finding solution)?
- 10 min each presenter - 50 min
- 25 min break out groups
- Each group shares - 15 min wrap up.
- Presenters/facilitator: take notes in their groups (or recruit someone).
- Presentations - powerpoint presentations
- Each presenter defines: 1) how they are defining resilience, 2) where data comes in? and 3) which type of community(ies) does your work respond to, Place Based? Institutional? Other (please define your community and how it's distinct).
- Presentation in the google folder by end of next week. - arika to set up

Dec 21, 2018, Arika meeting with Raj Pandya (TEX, AGU)

Email from Raj that summarizes the meeting: Arika and I talked about an interactive kind of presentation that introduces the TEX model and helps a group of introverted data-scientists know how to start to reach out to communities. Most of them, according to Arika, are interested in community-partnerships, but aren't sure how to find communities to partner with. We thought of an introduction to TEX process, maybe the community-role-playing exercise we do in the 101 workshop. Longer term, maybe working with Arika to place ESIP members in new TEX projects and even doing a launch workshop at the ESIP meeting this summer in Washington State.

Dec 19, 2018 - Cluster meeting

Attendees:

- Arika Virapongse
- Megan Carter

- Ruth Duerr
- Rupu Gupta
- Jonathan Blythe

- Ruth chatted with Raj Pandya at AGU last week. It would be useful to hear their perspective on: What their goals are - overview of their program. There are opportunities for the ESIP community to get more involved with TEX AGU. TEX works by matching researchers/experts with groups that are looking for help (e.g., city planners). Most of those groups end up having to deal with data and software. It would make sense for ESIP to be a source of expertise for data/software.
- It might be useful to hear from Raj more throughout the year, so we can stay in touch with different ways that we can see where we can plug in. Have him join again at a cluster meeting.
- Having guest speakers for the cluster meetings - particularly as we grow.
- What does resilience mean? What should it mean to ESIP? Technology as an enabler for community resilience? Need to be clear as to what the goals of our cluster are, so that we can attract new members.
- Ruth: Resilience in the face of a changing environment. What do people need to see to know what decisions they need to make?
- Rupu: Identifying the right people who need to part of the conversation. Being able to use the data available from the city to understand where the gaps are that the partnership can fill and reach different needs. Where data can come in for community resilience? How it fits within the ESIP scope?
- Jonathan: Bring in a broad range of speakers to the session. Presentations from perspectives that address the following communities: *Institutional. Place-based. Management. Intermediary between academics/decision-makers*. Define these. More speakers? What is similar, what is different about these presentations. **Try to define ourselves better.** Do a synthesis?
- Rupu: Each presenter defines: 1) how they are defining resilience, 2) where data comes in? and 3) which type of community(ies) does your work respond to, Place Based? Institutional? Other (please define your community and how it's distinct).
- Jonathan: National academies will be addressing community resilience next (according to Lauren Shoalwater (?), data manager) - Gulf Research program.
- TEX projects: https://thrivingearthexchange.org/projects/

Action items

- Defining template for presentations. Current questions are: 1) how they are defining resilience, 2) where data comes in? and 3) which type of community(ies) does your work respond to, Place Based? Institutional? Other (please define your community and how it's distinct).
- Finding more speakers? Jonathan: Lauren; Arika: Kirsten
- Coming up with additional questions to help stimulate discussion

    - What are different ways that the ESIP community can/should be involved with community resilience? (we asked this questions already at a previous session; results: https://docs.google.com/document/d/1aB5LlJbbK8O0EBjh5SM31HIW6ojFI7fwoqUhml3gc2I/edit#)
- Planning meeting: **Jan 3 or 4th before 1 PM ET** - Ruth - anytime; Rupu - before 1 pm ET; Jonathan - No Friday afternoon meeting; (Arika will check in with Ranalda to see if she can attend)
- Arika meeting with Raj on Dec 21 to get his thoughts on his presentation for the session

Agenda for session (90 min)
Arika: Intro to orient speakers (5 min). Define different communities.
4 Presenters (10 min each=40 min)
Survey of audience using template for presentation (5 min)
Discussion: 30 min - break out groups?

Nov 19, 2018 - Cluster meeting

Attendees:
- Arika Virapongse
- Megan Carter
- Ruth Duerr
- Rupu Gupta

Agenda:
- Carolina Behe - Indigenous Knowledge/Science Advisor, Inuit Circumpolar Council Alaska, carolina@iccalaska.org, www.iccalaska.org; she would be good to invite if we can find funding - this would help establish a relationship to the circumpolar indigenous community (the folks pretty much most affected by climate change).
- Funds for future speakers - ESIP does have a call for travel funds for the Summer Meeting (not Winter). You can also submit a special project to request special travel.
- Session: (1.5 hour)
    - Intro to cluster (Arika)
    - Everyone introduces their topic and interests (~15 min): 1) Jonathan, 2) Rupu (partnerships between universities and community groups - resilience plans - how to meet community needs?), 3) Ranalda, and 4) xxx

    - Discussion (20 min): 1) About presentations, 2) scope of cluster- future ideas for the cluster, 3) ties well to ESIP's goals - usability of data - how can ESIP help the larger sets of communities with Resilience issue, 4) get a sense of the interest level into joining the cluster - what do we actually want to do together, 5) groups that we need to reach out to/partner. Landscape survey.
- Arika: Reached out to 1) Raj Pandya - talk about what TEX is doing - current status and plans; and 2) Kirsten Hocutt (emails sent out on Dec 3rd)
- Next cluster meeting - brainstorm some ideas for activities that we want to do for the cluster. To prepare us to solicit ideas from other session participants.
- Meeting of the minds, 100 resilient cities, Disasters cluster - invite these groups to give a presentation on what they are looking for (gaps). Rockefeller resilience conference- metrics and measurement (http://www.measuringresilience.org/) Conference website: https://rmelconference.com/; social network/support. TEX group may be working on some of this.
- Each of our cluster meetings - have a presenter to get an idea of what the community is doing.

Kirsten Hocutt
Prediction: Community Stability after a natural disaster. The idea here is that after a disaster the economy would take a hit in the real estate, construction materials, wealthŠetc but if a community is on the rebound the number and rate of wealth would increase at a faster pace deeming that community ³resilient². If the community has a slower rate of rebound or none at all after a disaster then that community is deemed ³non-resilient². We can then explore socio-economic variables for those communities in a geographically weighted regression (GWR) to predict which counties would tend to be more resilient than others for the nation. We have a layers that states where high risk communities are but not the communities that actually are more likely to bounce back after a disaster. I¹m hoping to answer that.

Oct 17, 2018 - Cluster meeting

Attendees:
- Arika Virapongse
- Jonathan Blythe
- Ruth Duerr
- Rupu Gupta

Agenda
- Introduction to each other

- Consider the overall objective of the cluster
- Revise and prioritize short-term goals
- Specify and prioritize long-term goals
- Identify a monthly meeting day/time (cannot overlap with another ESIP cluster call; aim for a time between 9 AM- 2 PM MT :

Introductions: Interest in the cluster

- Jonathan: Local-level focus; resilience thinking can be applied to his work at BOEM; ESIP: decision cluster (now inactive - more like evaluation to help ESIP with long-term plan)
- Ruth: Interest in application in her community; indigenous peoples (Alaska); ethical issue; previous work at NSIDC; data stewardship, semantics, data discovery, sometimes goes to the climate ones
- Arika: social-ecology; ESIP: consultant for ESIP overall organizing a webinar series, and documenting on "20 years of making data matter"
- Rupu: New Knowledge - non-profit, interdisciplinary & evaluation think tank, community partners and established entities, resilience planners, what does resilience mean to a community? ESIP: none

Monthly meeting

- Third weds of every month; 2PM MT

Actions

- Everyone join: Slack channel #Communityresilience
- We will move forward with planning an ESIP 2019 winter meeting session. Planning doc: https://docs.google.com/document/d/1zvmY-kQd5b5DZKgTQ7DomRhmiKx-PiiWnnRXWRqcPkY/edit?usp=sharing
- Arika will establish our cluster monthly meeting times with ESIP and invite everyone

Winter meeting ideas

- Rupu: Working session - the ways that data can be used by communities, how data can be shared and exchanged, she could provide a presentation
- Ruth: Brainstorming Carolina Behe would be great to get more interest from the larger
- Touch base with Raj Pandya, AGU Thriving Earth Exchange to see what they are working on; they have worked with connecting communities with needs together with the science community
- Jonathan: He can speak to organizational perspective; resilience can help them to perform their mission - federal agency; can present on this aspect; mission is very broad - all of the continental shelf; contrasting ideas between resilience; 4 member types of esip: data centers - type I; NGOs; application developers; funders
- Academic presenter?
- ESIP can provide travel support ~$1000

- Invite SESYNC staff to present - “White Paper: An Overview Of Conceptual Frameworks, Analytical Approaches And Research Questions In The Food-Energy-Water Nexus” See section on “Data to Motivate Synthesis”. http://hdl.handle.net/1903/19174 or on website at: https://www.sesync.org/project/ventures/data-to-motivate-synthesis
- Indigenous person representative - what are their issues?
    - Network of indigenous folks in the far north - for example, co-production of knowledge from Carolina Behe who is at the Inuit Circumpolar Council - Alaska (ICC-Alaska)

Place-Based Community Resilience examples:

Martha’s Vineyard, MA: Oak Bluffs township uses data driven analysis to examine the vulnerability of coastal dwellings to storm surge and sea level rise.

Copied from our proposal to ESIP:

Goals

Our short-term goals are to:

1. Lead the December ESIP webinar for the series on “Socioeconomic value of Earth Science Data”
2. Publish a white paper that was drafted based on the results of a session held at the 2018 winter ESIP meeting. https://docs.google.com/document/d/1aB5LlJbbK8O0EBjh5SM31HIW6ojFl7fwoqUhml3gc2I/edit#
3. Host a session at the 2019 winter ESIP meeting

Our long-term goals are to:

1. Expand and improve the connections between data/informatics and community resilience practitioners
2. Define transdisciplinary knowledge frameworks that help support community resilience
3. Explore the role of data in advancing equitable community resilience efforts

Proposed work schedule

- Meet at monthly telecons to move forward on our short-term goals.
- Organize and execute the webinar in December 2018
- Host the next ESIP session in January 2019
- Submit the white paper before March 2019